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DEPARTMENT OF CITY PLANNING

SITE 4: WEST ASTORIA
CEQR 87-201 Q

PHASE 1A ARCHAEOLOGICAL ASSESSMENT REPORT

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for the

DEPARTMENT OF CITY PLANNING

SITE 4: WEST ASTORIA, QUEENS

CEQR 87 - 201 Q

Prepared

For: Department of City Planning:
Planning Management and Support
Environmental Assessment Program
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Date: May 5, 1988

ACKNOWLEDGEMENTS

The project directors would like to express their gratitude to Rachel Shatz and Sayid Ahmed of the New York City Department of City Planning for their cooperation in this project. William Asadorian of the Queens Borough Public Library, Edward Platt of the Borough President's History Advisory Committee, and Jon Peterson of Queens College shared their time and knowledge of the borough's past. The contributing authors for this report were Fulbright scholar Richard Scheafer and respected Queens historian Vincent Seyfried whose numerous publications on the subject include six volumes on the Long Island Railroad, Queens, A Pictorial History, and 300 Years of Long Island City. The primary authors appreciate their research which was valuable in assembling the data and in enabling them to make the archaeological assessment and recommendation for this report.

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I. INTRODUCTION

For a proposed rezoning action, the New York City Department of City Planning must satisfy City Environmental Quality Review (CEQR 87-201 Q) requirements which include an archaeological/historical assessment of the property intended for rezoning. The project parcel, known as Site 4, encompasses Lots 1, 6, 14, 20, 21, 22, and 40 of Block 519 in the Borough of Queens. Block 519, located in the West Astoria section of Queens, is bounded by Broadway, 31st Drive, 12th, and 14th Streets; however, the residential lots which front on 31st Drive - the northern section of the block - are not included in Site 4. The block is within Quality Housing Neighborhood #1 (Pot Cove), and lies two blocks east of Hallet's Cove on the East River. (See Figure 1.)

The purpose of this "Phase IA Archaeological Assessment Report" is to ascertain the potential type, extent, and signficance of any cultural resources which might be present on the site. The archival research documents both the possibility that Site 4 hosted prehistoric and/or historic resources, and the likelihood that such resources have survived the subsurface disturbances accompanying cycles of development. The following assessment of sensitivity serves to determine whether or not the proposed rezoning may result in significant adverse impacts to archaeological and historic resources on the West Astoria Site.

II. METHODOLGY

In order to fully satisfy the requirements of the New York City Landmarks Preservation Commission for assessing archaeological potential, Historical Perspectives, Inc. completed six separate tasks. Each of these tasks, described in detail below, were necessary to address the two guiding concerns:

(1) What is the potential for Site 4 to have hosted prehistoric and/or historic resources of significance; and,
(2) What is the likelihood that such resources have survived the subsurface disturbances concomitant with urbanization.

Task 1: Primary Source Material to Identify Usage Ownership

Pertinent data on the seven lots was gathered from the New York Public Library (Local History and Map Divisions), the Long Island Division of the Queens Borough Public Library, the Queens Historical Society, and various Borough departments. Nineteenth century and early twentieth century Queens residential and business directories were reviewed.

Of crucial importance in assessing the potential for prehistoric Site exploitation is the reconstruction of the Site's topographic conditions (i.e., elevation and drainage) during various prehistoric cultural periods and such information was sought out during each of the task phases.

Task 2: Secondary Source Material

In order to place the West Astoria Project Site in an historical context, local and regional histories were reviewed for pertinent material (e.g., French's HISTORICAL AND STATISTICAL GAZETTEER OF NEW YORK and Armbruster's LONG ISLAND LANDMARKS). Vincent Seyfried's 300 YEARS OF LONG ISLAND CITY, a detailed history that includes the Project Site, was relied on heavily since his research incorporated each of the earlier, important histories of the Borough (e.g., Riker's ANNALS OF NEWTOWN and VonSkal's ILLUSTRATED HISTORY OF THE BOROUGH OF QUEENS, and the Munsell and Company 1882 publication HISTORY OF QUEENS COUNTY).

The works by Reginald Bolton, Robert Grumet, and Daniel Denton (on Native American exploitation in western Long Island) were researched.

Task 3: Archaeological Literature

Queens has a long history of archaeological research. Antiquarians recorded nineteenth century interest in local Indian artifacts and since the 1920s both professional and amateur archaeologists have conducted digs and published reports on their findings. Also, artifact collectors have long been active in the borough. Available site reports, photograph collections, journal publications, etc. were reviewed for data specific to the project area.

Inquiries on inventoried prehistoric and historic sites were directed to the New York State Museum and the New York State Historic Preservation Office.

Task 4: Subsurface Disturbance Record

Paralleling the research to determine the Site 4 prehistoric and historic archaeological potential was research to determine the likelihood that any such resources are extant, having survived the normal destructive forces of development. Documentation on past construction (e.g., residences, businesses, utility installation) and demolition was collected on a lot by lot basis to determine cycles of late nineteen and twentieth century subsurface disturbances and to identify the possible impacts these cycles may have had on pre-existing subsurface archaeological resources. Due to the lack of record keeping (Block and Lot Folders, Buildings Department) before the late nineteenth century, the early construction history of the subject parcel had, in part, to rely on atlases, insurance maps, and comparative data.

Task 5: Informant Interviews

To augment the records research, described above, interviews were conducted with both amateur and professional archaeologists and historians knowledgeable in Queens prehistory and history. Insights from long term residents of the West Astoria neighborhood were gathered.

Task 6: Field Visit and Photographic Record

No subsurface investigations were conducted. During a site visit (4/11/88) a photographic record of current conditions was made.

III. ENVIRONMENTAL SETTING

The north shore of Long Island is regularly indented by bays and estuaries - a legacy of the last advance of the Wisconsinian glaciation of 10,000 - 12,000 years ago. Although not apparent on today's landscape, for thousands of years these bays and estuaries hosted large tracts of wetlands. As can be noted on the attached maps, discussed chronologically in the Historic Era section, until the twentieth century the majority of the project site was once part of such a vast inundated marshland. Therefore, in order to appreciate the prehistoric and historic potential of the site we must place the West Astoria project land in the context of its pre-twentieth century condition.

The Department of City Planning Site 4 on western Long Island is physiographically part of the Coastal Plain.[1] Long Island is the top of a Coastal Plain ridge formation that is covered with glacial drift. In reality the plain is an elevated sea bottom demonstrating low topographic relief and extensive marshy tracts.[2] Continental glaciation affected the surficial geology of Long Island as the glacier advanced and receded at least three times in the last million years. The Ronkonkoma and Harbor Hill were two sub-stages of glaciation, whose melting fronts left a series of ridges (moraines) across the length of Long Island.[3] Glacial till and outwash, consisting of clay, sand, gravel, and boulders were deposited by the melting ice sheet. For approximately 3,000 years the project site was part of a meandering creek system. "These develop in the first place purely as drainage channels, and are the result not so much of erosion as of non-deposition."[4]

Currently the topography of the project area is generally low and flat, registered between the 10 and 20 foot contour on the USGS Central Park Quadrangle (7.5' series, 1975; See Figure 2.) The parcel does not appear to host any non-domesticated vegetation. The majority of the property is covered with concrete or asphalt pavement and standing structures. (See Photographs A - L.) However, the pre-twentieth century terrain can be detected in the slope of the rear yards/gardens of the private home lots that are outside the Site parcel but abut the project parcel's northern border. (See Photograph G.) This natural slope was, at one time, the northern bank of the small, unnamed stream that flowed through Block 519.

Presently dominating the site is a large scrap iron and metal salvage yard, fronting on Broadway. (See Photographs I - L.) On the southeast corner of the block is a small hotel and surface parking lot and on the southwestern corner is a two-

story, brick office structure. (See Photographs A - B.) Two attached, frame houses front on 12th Street, next to Lot 22, also fronting on 12th Street, which hosts a brick and stucco garage/residence. (See Photographs C - F.)

IV. PREHISTORIC ERA

The prehistoric archaeological record of the north shore of western Long Island can be divided into three blocks of time: the Paleo-Indian Period (ca. 13,000 - 10,000 years ago), the Archaic Period (ca. 10,000 - 2,700 years ago), and the Woodland Period (ca. 2,700 - 300 years ago). To understand how native Americans, during various time periods, exploited different environmental niches (e.g., the estuarine marshland at the confluence of two streams which is known to have been Site 4's specific configuration at one time), it is necessary to understand each of the above time periods and the settlement patterns associated with them.

Paleo-Indian Period (ca. 13,000 - 10,000 years ago)

The Paleo-Indian Period encompasses the time period of the final disappearance of Pleistocene glacial conditions from Eastern North America and the establishment of more modern Holocene environments. Glacial recession from Long Island was probably complete by about 18,000 years ago. A post-glacial conifer cover consisting mainly of spruce and pine was beginning to be augmented by hardwoods such as oak and hickory at that time - trees which, because of their food value, have much greater utility for man than conifers. "A global warming trend about 12,000 B.C. encouraged Paleo-Indian settlement of the Northeast. By 8,000 B.C., when Paleo-Indians may well have been present in coastal New York, deciduous species dominated forests all along the eastern seaboard; the Pleistocene megafauna were rapidly becoming extinct, perhaps with the help of aboriginal hunters, and were being replaced by the temperature-climate fauna that are indigenous today."[5]

Tool kits of Paleo-Indian groups were oriented toward the procurement and processing of hunted animal resources. A preference for high quality lithic materials has been noted and careful resharpening and maintenance of tools was common. The characteristic artifact of the Paleo-Indian Period is the fluted point. According to Walter Saxon's 1978 publication, no fluted points have been securely associated with a site provenience in Queens County.[6] Inquiries directed to individuals knowledgeable in private "arrowhead" collections from Queens revealed no known Paleo points.[7] "A lifestyle of movement among the game attractive environments has been hypothesized with the social organizations being based upon single and multiple family bands."[8] These small, highly mobile groups would not have left very much evidence of their activities. Sites dating from this time would consist chiefly of small camp sites, lithic reduction stations, and isolated finds. Adding to the difficulties in

trying to locate potential Paleo-Indian sites is the rise in the sea level since 10,000 years ago (roughly 75-80 feet) and, to a much lesser degree, crustal subsidence since that time.

Archaic Period (ca. 10,000 - 2,700 years ago)

The Archaic Period is characterized by a series of adaptations to the newly emerged full Holocene environments. By about 5,000 B.C. the modern distributions of both flora and fauna had been achieved. Environmental changes immediately before and after this stabilization are reflected in the Native American culture of the time, referred to as the Archaic. "With the warmer and drier climate, the tundra and spruce forests disappeared and deciduous woodlands gradually appeared. The oak and hickory woodlands of coastal New York attracted mast-easters like the white-tailed deer and wild turkey. During this later post-glacial period, the melting ice no longer poured large amounts of meltwater into local rivers and streams. The slower stream flow allowed the growth of marsh area and mud flats that encouraged the influx of migratory waterfowl and the growth of numerous edible plant species and shellfish. The subsistence and settlement systems of Archaic groups were based on a restricted wandering system which consisted of seasonal movements to and from base camps located near resources."[9]

Tool kits were more generalized than earlier Paleo-Indian tool kits and showed a wider array of plant processing tools such as grinding stones, mortars, and pestles. A mobile lifestyle was probably common with a wide range of resources and settings utilized on a seasonal basis. A shifting band-level organization which saw the waxing and waning of group size in relation to resource availability is evident. The archaeological record does present a profile of the Archaic culture: small, multi-component sites usually situated on tidal inlets, coves, and bays, particularly at the heads of the latter, and at fresh water ponds on islands along the New York coastline; and, by the Late Archaic stage, coastal sites and the exploitation of shellfish resources are heavily represented.[10] The Late Archaic Wading River complex, four archaeological sites on the north shore of Suffolk County, was found on the edge of a salt marsh, on the dry ground that ranges from only 2 to 7 feet above mean high water.[11] Areas of steep slope and poorly drained ground would not have been suitable for habitation or activity areas, although stray finds, like projectile points lost during resource exploitation, may occur in these locations.

The Paleo-Indian, Early Archaic, and Middle Archaic cultural periods are poorly represented in coastal areas of the Northeast, but by Late Archaic times sea level was so close to

present levels that its subsequent small rise has failed to obliterate much of what remains on Long Island from that period.[12] Recently, there has been a demonstrated interest by New York archaeologists to consider the realistic potential for investigating these long-submerged sites.[13]

Woodland Period (ca. 2,700 - 300 years ago)

The Woodland Period can be correlated with a dramatic change in local climates and environments. A pronounced warm and dry period set in and lasted from ca. 5,000 to 3,000 years ago. Mesic forests were replaced by xeric forests of oak and hickory, and grasslands again became common. Some interior streams dried up but the overall effect of the environmental changes was an alteration of the environment, not a degradation. Continued sea level rise also made many areas bordering Long Island Sound the sites of large brackish water marshes which were especially high in productivity. The major changes in environment and resource distributions caused a radical shift in adaptations for prehistoric groups. Important areas for settlement included the major river floodplains and estuarine swamp/marsh areas.

From approximately 3,000 years to the arrival of Europeans, Native Americans of southern New York shared common attributes of the Woodland Stage: the advent of horticulture, large permanent or semi-permanent villages, pipe smoking, the bow and arrow, extensive trade networks, and the production of clay vessels. The habitation sites of the Woodland Indians increased in size and permanence as these people continued to extract food more efficiently from their environment. The archaeological evidence from Woodland Period sites indicates a strong preference for large scale habitation sites to be within very close proximity to a major fresh water source, e.g., a river, a lake, an extensive wetland, and smaller scale extractive-functioning sites to be situated at other resource locales, e.g., quarrying sites, butchering stations, shell gathering localities. Late Woodland Stage sites of the East River Tradition in southern New York have been noted on the "second rise of ground above high water level on tidal inlets: and situated on "tidal streams or coves" and on "well-drained sites."[14] Carlyle S. Smith, who studied and anlayzed the distribution of prehistoric ceramics in coastal New York, states that "village sites" are found on the margins of bays and tidal streams."[15]

Woodland Period tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant and processing tools became increasingly common and seem

to indicate an intensive harvesting of wild plant foods that may have approached the efficiency of horticulture, which itself appeared during the second half of the Woodland Period. According to current archaeological research in the Connecticut River Valley (including carbon dates), maize cultivation may have been in place as early as 800 years ago.[16] The advent of horticulture is tied in with the introduction of ceramic containers which allowed for more efficient cooking of certain types of food and may also have functioned as storage for surplus food resources. "With the onset of relative sedentary lifestyles and intensified food production, which might have produced occasional surpluses, incipient ranked societies may have begun to develop, as indicated by the presence of extensive trade and exchange and some caching of special artifact forms."[17]

Anthropologists and linguists agree that when Europeans arrived in the Queens area the Native Americans were Munsee-speaking Upper Delaware Indians. Denton reported, in 1660, that the diseases introduced by the white men had already reduced the Indian population in this area of Long Island from six to two villages. As described by Denton, the Native Americans at this time lived principally by hunting, fishing, fowling and the cultivation of corn. He reported that the Indians re-located their "small moveable Tents" two or three times a year going to their principle quarters where they plant their corn, hunt, and fish.[18]

Although not visible on today's landscape, the Site 4 area, prior to twentieth century landfill activities, was part of a tidal wetland and salt meadow, hosting a small tributary stream that drained into Sunswick Creek to the southwest. (See Figure 2.) The tidal estuaries of these streams, and the marsh into which they emptied, provided prehistoric man with an environment of astounding natural richness. These resources included shellfish (some edible genera available all year long), reeds and shrubs (edible - e.g., beach plum and utility - e.g., cord grass and salt hay), water fowl, fish, and small mammals.

As outlined above, Woodland Indians preferred well-drained, elevated sites near a large-scale marsh biome. On the southern border of the project parcel is the Broadway roadbed, which roughly corresponds to an earlier road (old Ridge Road) that may have been laid on a natural elevation slightly south of Broadway. (See Figure 3). Also, the extreme western side of the project parcel may have been sufficiently elevated to support a prehistoric processing station since it is known to have hosted a fertilizer manufacturing plant during the nineteenth century. In the southern New York area archaeological deposits of the

late Archaic and Woodland times are not deeply buried, often being revealed through erosion, plowing, or house construction.[19] Based on topographical factors, the areas of possible archaeological sensitivity within the project parcel are severely restricted to this southern edge and western edge. Documentation indicates that the original old Ridge Road was possibly as much as one-half block south of the project parcel and, regardless of exact location, the subsequent Broadway roadbed grading/crowning/construction and utility installations would have impacted the southern border; and the nineteenth century fertilizer plant, the laying of 12th Street, and the erection of the extant structures fronting on 12 Street would have impacted the project parcel fronting on 12th Street.

Archaeologists not only rely on past environmental components to assess site potential but they also rely on tales of "Indian relics," ethnographic accounts, and published archaeological reports.[20] The Native American presence in Queens has been re-constructed through a compilation of these sources. Earlier in this century Reginald Bolton researched the Indian past of New York City and reported that at the time of European influx the Rockaway Chieftaincy stretched diagonally across Long Island from the East River to Jamaica Bay. He placed large Indian villages along the Newtown Creek inlet, in Maspeth, and in Rockville Center and smaller, perhaps subordinate, settlements were identified in Jamaica and North Beach. According to Bolton, the West Astoria project area did not host a major settlement:

> Northwest of Mispat [a subordinate chieftaincy residing in the Newtown area], over the promontory now [1922] forming the growing Long Island City and its environs to Corona, a great tract of forest land extended to Flushing Bay. This was known to the natives as Wandowenock, which Armbruster defines as "the fine land between the long streams" of East River and Flushing Bay.
>
> The only known station within this broad region is at Ravenswood Park (111) [the land originally laid out as Ravenswood Park is south of Sunswick Creek inlet, east of Vernon Avenue], on the bank of the east channel of the East River, where a shellheap [midden] indicates native residence, and some native objects were discovered by W. L. Carver.

> It is not possible to suggest any particular line of trail connecting this place with Mispat. The path, if such there was wound its way through the timber, which in later years was all cut off, through the narrow neck of dry land between the heads of the Sunswick and Canapaukah [Dutch Kills] creeks, near the present entrance to the approach of the Queensboro Bridge.
>
> The name of the "creek, called Sunswick," means "a stone house..." The name is connected with the tract on the north side of the creek, known to the natives as Sint Sinck, a "stony place" [Hallet's Point] which in 1664 was sold to the Colonists by Shawestcout and Erramorhas.
>
> It would seem natural for the neck of land which these creeks enclosed to afford shelter to the aborigines, especially as the waters between the Hunters Point shore and that of Minnahanonck, or Blackwells Island [Roosevelt Island], must have afforded good fishing, and the shallows of Mespaetches [Newtown Creek] should have been the nursery of countless oysters.[21]

A later Bolton publication does identify a West Astoria Indian "station," labelled Sanfords Point, that was marked by various Indian objects and was "favorably situated on this point of land extending into the East River."[22] (See Figure 5.)

Robert Grumet's later, parallel line of research into Native American place names, questioned Bolton's association of "Sint Sinck" with Hallet's Point, placing it, instead, in Nassau County. Grumet did not add any further information on Native American associations with West Astoria.[23] (See Figure 6.) Ralph Solecki's 1930s research in Astoria was concentrated north of the Triborough Bridge in the Astoria Park area, far removed from the Project Site.[24] (See Figure 7.)

The New York State Historic Preservation Office/Field Services Bureau (SHPO) has identified the Rainey Park area as the location of Bolton's Sunswick Shell Midden Site (#A081-01-0100). Rainey Parik, is approximately 3 blocks west and 2 blocks south of Site 4 and is most likely the site of Carver's collection referred to above. Our earliest maps of the area do show the Park area as dry, elevated land at the confluence of the East River and Sunswick Creek.

Arthur C. Parker's 1922 THE ARCHAEOLOGY OF NEW YORK, in conjunction with his unpublished maps, is used by State Offices in Albany as a major resource in establishing potential archaeological sensitivity. SHPO has loosely identified Parker's Queens Site #12 (#A081-01-0099) with all of Hallet's Point and Parker's Queens Site #14 (#A081-01-0101) with a large 5 block by 7 block area just north and east of the Project Site. (See Appendix A.) The State Museum site #4535 also corresponds to Parker's Queens Site #12, a shell midden, and is imprecisely located south of the Astoria Houses residential complex and west of the Main Avenue and Vernon Boulevard intersection, four blocks north of Site 4. (See Appendix A.)

As can be seen by the appended correspondence, both the State Museum and SHPO consider the West Astoria Site 4 parcel to host a degree of archaeological potential. This assessment, based on a sensitivity model, relies on a comparison of current geographical and topographical features of known, mapped site locations with the threatened locations that have undocumented histories. (Philip Lord, personal communication, 5/2/88) On the current USGS map, used by the State agencies, it is impossible to detect the Site's pre-twentieth century marshland condition.

V. HISTORIC ERA

The Astoria area of Queens was first settled, ca. 1635, by Jacques Bentyn, a member of the West India Company. His grant of about 160 acres, extending from approximately 25th Avenue south to Sunswick Creek, covered all of what we now call Hallett's Point. In 1652 William Hallett, an Englishman, "applied for the abandoned Bentyn plantation and received it as a grant from Peter Stuyvesant. Hallett built a farm at the head of Hallett's Cove close to the water and very probably on the same cleared site as Bentyn's buildings. At the present 26th Avenue and 12th Street was a 57 foot hill, the highest point in Astoria... At this remote time, except for his own small clearing, all was trackless forest or swampy meadow."[25] This farmstead was detroyed by an Indian attack (1655) and Hallett left the area until 1664, when he returned to Astoria and bought approximately 2200 acres from Chief Mattano for 58 fathom of wampum, seven coats, one blanket and four kettles. This huge tract included all of modern Astoria and Steinway, including the Project Site. In 1670 Hallett purchased the 100 acres adjacent to his southern border - and the Project Site - that extended along the "Ridge," later the line of Broadway/Ridge Street/33rd Avenue. The Halletts channeled the low lying marsh meadows - most probably including the Project Site - with a drainage ditch along the present day 21st Street.[26] "To keep the salt water out at high tide, the Halletts as early as 1679 built a dam across the mouth of Sunswick Creek which continued to be maintained for almost 200 years."[27]

In the century that followed the Hallett farm was divided among family heirs. The Project Site is situated on what became the south farm which had been established at Ridge Road (33rd Avenue) and 33rd Street before 1738. "West of the farmhouse and along the line of the Ridge Road were clay pits and a lime-yard where several eighteenth century Halletts manufactured bricks. At the west end of the Ridge Road and near Sunswick Creek, John Buckhout and John McDonough had established farms on former Hallett land by marrying into the family."[28] At some point in the eighteenth century a farmer named Suydam added a grist mill to the Hallett's dam at the mouth of Sunswick Creek, flooding the meadows at high tide and allowing the water to flow out at slack tide to power his tide mill. The impounded waters overflowed a lot of low meadow land and formed the Sunswick Mill Pond. (See Figure 4.) "The sluice was opened at low tide to turn the under-shot wheel to grind grain and corn."[29]

All the land, except a narrow stretch along the East River, was salt meadow and uninhabited. By the late 1700s the sole passage through this wasteland was old Ridge Road, a winding

track roughly equivalent, at the Block 519 location, to today's Broadway. In this early period there were two residences in the immediate vicinity of the Site: (1) the house of the miller; and (2) the Field family farm house, a Dutch-style dwelling on the northeast corner of what is today Vernon Boulevard and Broadway (demolished ca. 1938).

"The Revolutionary War and the British occupation had one good and lasting effect in Astoria. The constant coming and going of military personnel and civilians at Hell Gate induced a merchant of Newtown...to establish the first regular ferry service to New York."[30] The ferry tavern stood (ca. 1785), between 31st Avenue and 31st Drive and east of Vernon Avenue, approximately 2-3 blocks northwest of Site 4. This tavern structure was later owned by Grant Thorburn who will be discussed below. Revolutionary War artifacts have been collected from the Ditch Kills and Maspeth Hills area for over 100 years.

Concerns for military protection, created by the onset of the War of 1812, were met with the erection in 1815 of Fort Stevens, named for a Revolutionary War hero residing in Astoria. This fortification, mounted with twelve guns, was built on Hallett's Point at 1st Street and 26th Avenue, far removed from the Department of City Planning Site.[31] There was no war action in the borough.

The first change in the Block 519 neighborhood was the arrival of Grant Thorburn in 1834. He had been a nail manufactuter in New York but machine-made nails put him out of business and he hit upon raising nursery stock and selling seeds. His gardens and seed houses were located just north of 31st Drive and east of Vernon Boulevard, at the ferry tavern location. The old name of 31st Drive - Camelia Street - reflects his specialty. Thorburn became very successful and generated so much mail that the authorities in Washington appointed him, September 1834, the first postmaster in Hallett's Cove. By 1860 this section of Queens was particularly noted for its floral gardens, greenhouses, and graperies with six floral establishments for supplying the city market.[32] Throburn's holdings extended southerly to the streambed that bisected Block 519. His property, north of the streambed, included present day Lots 20, 21, and 22, as well as the Northern half of Lot 14. An 1837 sketch of the Hallett's Cove community, Figure 8, depicts Grant Thorburn's homestead and shows the Project Site as vacant land. In 1840 the land south of the streambed, present Lot 6, and the southern halves of Lots 1 and 14 belong to W. R. Prince, another nurseryman, while the land east of the creek bed,

including Lot 40 and the northern section of Lot 1, were part of the farm of Samuel Stevens.[33]

Stephen A. and John C. Halsey established large estates on Hallett's Point in the 1830s and began the movement to create a village on their land. Stephen Halsey, often referred to as 'the father of Astoria,' worked untiringly to develop the village, building factories, stores, shops, and residences, and induced tradesmen to locate in the burgeoning community.[34] "At the time of its incorporation [1839] it was proposed to call it "Sunswick," from the Indian name of a stream nearby; but the name Astoria was adopted, in hope of securing a gratuity from John Jacob Astor. In this, however, the people were disappointed, as he gave only $100 to the seminary."[35]

The next important event in the neighborhood was the opening in 1840 of Vernon Avenue (Boulevard), as part of the "Ravenswood, Hallett's Cove and Williamsburgh Turnpike Road and Bridge Company." The new road extended south from 331st Avenue along the East River shore and down to Greenpoint; bridges spanned Sunswick, Newtown, and Brunswick Creeks. Vernon Boulevard was the first road to connect Astoria with Hunter's Point and Brooklyn and stage coaches began operating over it from the 1840s onward.[36] Subsequent to this development, Halsey and his business associates bought additional farms to the east and south [of the village] and then laid out and opened through them a number of streets, including Broadway.[37] As can be seen on Figure 4, the Project Site parcel was first lotted during this initial development.

Some time before 1850 John Jackson arrived in the Astoria community and opened the "Astoria Chemical Works" on what may be the western edge of Block 519 and the roadbed of 12th Street, just above old Ridge Road. The name is not to be taken literally in the modern sense; Jackson turned out fertilizer for farmers, very possibly a bone-boiling place for animal carcasses or a processor of dry alkalies.[38] This factory appears as a long narrow building on the 1849 (Figre 4), 1858 (Figure 3), 1852 (Figure 9) 1859 (Figure 10), and 1873 (Figure 11) maps. Probably the nursery industry was a ready-made market for Jackson's fertilizer. On Figure 4, note the access road, named Primrose, from old Ridge Road to the factory building. This lane, seen again on a 1903 Atlas (Figure 12), roughly corresponds to the left half of the present 12th Street, also known as Sherman Street.

In 1845 a carpet works was established on the meadows below old Ridge Road between 14th and 21st Streets by Alvin and E.S. Higgins, two brothers born in Maine and who came to New York in

1838. Between 1852 and 1859 the Higgins Brothers sold out to James Maloney who continued to operate the plant for years, using Irish immigrant labor drawn from Astoria. (See Figures 4 and 11.)

In the 1840s the Field family, referred to above, died out and their house was sold to two brothers, Issac D. and Charles W. Strang. They opened a sawmill and during the Civil War, under contract to the Federal government, turned out wooden cartridge boxes. They also dabbled at building carriages. Note the "Box Shop" on the 1859 map (Figure 10) at the west side of Primrose, outside of Site 4. Henry and Thomas Taylor, in 1849, opened their carriage manufactory on the meadow lands south of Broadway and just west of what is now 12th Street. This became one of the most well known commercial establishments in its field and lasted into the twentieth century. (See Figure 11.)

By the mid-nineteenth century Astoria had developed distinct ethnic, residential and industrial neighborhoods. "The southern end of the village was not desirable because the land was low-laying or meadow. Drainage canals had been installed at regular intervals leading into ponds and these emptied into Sunswick Creek below Broadway. One canal ran along the line of 29th Avenue and another long the line of 30th Road. The line of 14th Street below 30th Road was occupied by a three block long pond down to 31st Avenue."[39] According to the 1852 map (Figure 9) this pond emptied into the Creek system that ran through Block 519.

An 1868 quote from the "Star" illustrates the quickening pace of Astoria's development:

> The movements on foot in the village of Astoria are indicative of a healthy local prosperity. The opening of streets, the erection of new and handsome buildings, the filling-in of sunken lots and the grading and planting now in operation on all sides, give unmistakable evidence of the activity and enterprise of the people.[40]

However, the Project Site was on the northern edge of the Sunswick marsh and this great swamp area of south Astoria, extending behind Ravenswood, remained undeveloped and largely empty till the twentieth century.

The opening of the Queensborough Bridge made land too valuable to further ignore the marshlands. In 1909 when the Bridge opened, the whole vast area beneath it, from the East River to Queens Plaza and for a mile to the north and south, was

still a vast wasteland. The City itself began in 1912 to reclaim the old meadows south of Site 4 by extending 12th and 14th Streets south from Broadway where they terminated at that time. The City then pressed the owners of the meadow land to fill in their properties to the new grade level of the streets.

According to the Hyde "Atlas of the Borough of Queens" (1908, corrected to 1911 and 1919) Broadway was paved (with "granite") by 1911, while 12th and 14th Streets were paved with asphalt in 1919. Also by 1919, there were water and sewer lines running beneath these three streets, the sewer lines discharging into the East River, approximately two blocks to the west.

Block 519 occupied a poor position topographically. A tributary of the Sunswick Creek system moved diagonally across the Block, east to west, joining the Creek at approximately 12th Street. The 1852 map (Figure 9) indicates that almost all of the Block was wetlands except for the small area on the west occupied by the Jackson Chemical Works and which, most certainly, extended westerly into the present 12th Street roadbed. There was little inducement to build on so unattractive a plot. By 1873, five small private houses had been erected along Camelia (now 31st Drive). Over the next thirty years, to 1903, only four additional houses appear east of the original five on Camelia, and on land formerly depicted as marshy.

Project Site: Lot Analysis

The construction record of the project portion of Block 519 will be presented by individual lots, based in large part on information gathered from the Queens Department of Buildings Record Room and a series of maps and atlases.[40] To correlate lot numbers with the current landscape, see Figure 14, a sketch of the 1987 Sanborn Land Use Map.

Lot 1: Corner of Broadway and 14th Street

This Lot was first built on in 1907, when a two-story brick structure with a cellar was erected at the southeastern corner of the property, and still stands today as one of two attached buildings on Lot 1. This is corroborated by the cartographic information, which shows no earlier construction. The ground was described as "clay", and the concrete foundation was laid on "earth," nine feet below the ground surface (New Building Permit Number (NB)994-1907). Part of the dry streambed passed directly under this building (Hyde 1919:6). The second building, a one-story stucco structure was built 1921-1922, at which time the

Lot hosted an "automobile company." There is no evidence of a basement or other below ground disturbance (NB2618-1921; NB14646-1922). The two structures have had several uses, including a varnish works (1934), Astoria Wood Novelties Corp. and Van Alst Metal Works (1955), and the Turf Club Motor Inn (1973, 1987). The vacant section of the Lot is presently paved with asphalt and used for parking. (See Photograph A and H.)

Lot 6: Broadway

Lot 6 takes up approximately half of the study area, an irregularly-shaped parcel stretching between Broadway and the dry streambed. At various times the Lot was associated (but not amalgamated) with Lot 40, which will be covered separately. In addition to this, most of the building records are missing, and this short parcel history must rely more heavily on atlas data. The first building recorded on Lot 6 was erected in 1907 (Lot 6 Index Card). The 1911 and 1919 Hyde atlases show a "Stone Yard" with six frame sheds scattered over it. The number of sheds varies through time. It is unlikely that these sheds had deep basements or foundations. By 1957 the stoneyard was replaced by a scrap iron yard, still functioning today. The atlases are clearly in error, since they refer to Lot 6 as a stoneyard through 1987. In 1957, the scrap metal company removed several sheds and built a scale and a single-story structure for the storage of scrap metal on Broadway near the southwestern corner of the property. This replaced an existing metal building on the same site. The new building had no basement. Its foundations ranged from four to five feet in depth. Soil borings made at this time show the water table at 6'9", fill to about 12 feet, with a layer of soft clay beneath that. The top eight inches of fill on the building site were removed and replaced with "clean underfill," (free of organic matter), wetted down and tamped. (See Appendix B for more precise soil borings data.) The scale must have caused additional ground disturbance, since it is flush with ground level (NB1806-1957). Presently the All-State Scrap Iron & Salvage Corp., the 1987 atlas does not depict the 1957 building, but four structures around the perimeter of the Lot. The accuracy of this is difficult to assess, since on the site visit (4/11/88), the investigators were prevented from entering the well-fenced compound by a security worker. The ground surface was observed to be covered with asphalt, and their is still evidence of depressions at the approximate location of the dry stream bed. (See Photographs J, K, and L.)

Lot 14: Corner of Broadway and 12th Street

Although empty in 1891, Lot 14 was host to a sawmill by 1903. The sawmill straddled the streambed, but there is no reason to believe that it was water-powered, since the fact that other buildings were built over the bed indicates that the stream was already dry at that time. The sawmill was a two-story structure, with two smaller out-buildings on the Lot, a shed which was removed when Primrose Street/Lane (now 12th) was widened before 1911 and a shed and a two-story building on what was Lot 19 until 1919 (Wolverton 1891:5; Hyde 1903:7; Hyde 1908 corr. to 1911:7; Hyde 1919:6). A series of business directories were reviewed in hopes of finding more definitive data on this sawmill. "The Star Directory of Long Island City," Volume 3: 1894-95, lists I. Hanson's business (Sash, Doors, and Blinds/ Saw and Planing Mills) located at 81-83 Broadway (near Boulevard), Astoria. According to the house numbering system at that time, Hanson's works would have been the sawmill on Block 519. However, in the "Trow's Business and Residential Directory of the Borough of Queens" for both 1898 and 1908 there is no listing under Sawmill, Planing Mill, Wood Moldings, or Frame Makers for an establishment on the Project Site.

The buildings on the 1919 map, although labelled "Saw Mill," had by 1909 been converted into dwellings (Alt719-720-1909; See Figure 15). At that time the "factory" building, at the corner of Broadway and 12th Street, was remodelled into two, two-family dwellings. There was no celler, but the foundation was locust posts resting on mud sills, 7' deep. The stable along 12th Street, 100' north of Broadway, was converted into a dwelling as well. The 20' by 20' house had no basement, and rested on 12" square brick piers, which extended 4' below the ground surface. By 1931 these homes were replaced with a building used for a garage, storage of building materials, and an office. It had a boiler room, with the foundation resting on earth, which was described as "filled in ground (½ Ton)," but the application does not indicate depth (NB379-1931). No new building permits postdate this one, therefore this must refer to the present building, which is two-story brick fronting on Broadway, and one-story frame at the rear (Hyde 1928 corr. to 1934:21). A faded sign on the structure still reads, "Timkin Oil Burners," and accordingly, in 1974 an 8' by 22', 4,000 gallon gas tank in addition to the existing 500 gallon tank, was installed 8' below the boiler room floor, beginning 23.75' north of Broadway and extending 22' north (17.5' from 12th Street) (Misc323-1974). There are no building records available for the northern section of Lot 14, (formerly Lot 19). The three single-story frame buildings that the 1928 (corr. to 1987) Hyde

Atlas depicts on this section of the Lot, date from before 1934 (Hyde 1928 corr. to 1934:21). (See Photograph B.)

Lots 20 and 21:12th Street

The frame house on these two 20' by 100' 4" lots were probably built at the same time since they are attached, mirror-images of each other, and both appear in the atlases at the same time, 1903. (See Figure 12.) Each has two stories, a cellar, and each had a small stable/garage to the back of the property along the northern border (Hyde 1903:7). Both houses still stand on their original plots (Hyde 1928 corr. to 1987:21). Most of the building records are missing for the structures, but Alt962-1914 shows that the floor of the Lot 20 cellar was approximately 11' below the level of the first floor. Given the similar histories of the two houses, it is reasonable to assume the same for Lot 21.

Lot 22: 12th Street

Lot 22 contained the earliest structure in the project area, what appears to be a house with a stable or shed to the west (Wolverton 1891:5). It is probable that the same house was depicted in the 1903 atlas, a 1½-story frame house directly behind Lots 21 and 22 (Hyde 1903:7; See Figure 12.) However, this building must have been demolished, because in 1914 a two-family house was built on the property, over an old foundation. The old cellar floor was filled in until it was 2' higher, and 8' below the new first floor. Although most of the building records for this Lot are missing, no new buildings were erected until 1922, so it is likely that the foundations were those of the house present in 1903. The only building on the Site today is on a different section of the Lot, directly north of Lot 21, along 12th Street. It was built in 1922. (Block 519, Lot 22 Index Card). The front section is two-stories and of brick, while the rear of the building has only one story and is stucco. (See Photograph E.) A boiler was added to the structure in 1936, placed between 2' and 6' beneath the first floor. Measuring 6'5" long, it was installed in the northeastern corner of the building (Alt8607-1936).

Lot 40: 14th Street

From the atlases and maps, Lot 40 is an irregularly shaped parcel with a northern boundary which roughly approximates the old stream bed. The only building record available was for the house on Lot 39 (Alt572-1922), which may have encroached on the Lot 40 property, but this does not agree with the atlases, which show that building to be whooly on Lot 39. The only documented

use of Lot 40 was as a parking lot for the scrap metal yard on Lot 6 (Lot 6, NB1806-1957). Little could be seen on the site visit (4-11-88) because Lot 40 is enclosed by the Lot 6 fence, -- it is paved, and on the south side there is some sort of below-ground pumping mechanism. (See Photograph I.)

VI. CONCLUSIONS AND RECOMMENDATIONS

There is overwhelming evidence that Native Americans exploited the natural resources of western Long Island for thousands of years before the Europeans arrived. Specifically, there is evidence that portions of Astoria - not far removed from the subject parcel - were attractive to the Indians. There are two limitations to our knowledge of this Native American presence in regards to the Department of City Planning parcel: (1) the State inventoried sites, based in large part on Bolton and Parker's vague and imprecise locational data, are only approximate locations on the modern landscape; and, (2) cursory examinations of the modern landscape and current maps do not readily reveal the natural, pre-twentieth century geographic and topographic features of these known loci and the Project Site. It is impossible to more definitively locate sensitive areas reported generations ago. Therefore, the above research has focused on the second limitation, accumulating sufficient information to adequately compare geographic and topographic factors of inventoried site loci and Site 4.

Settlement pattern data of the prehistoric culture periods does indicate a strong association between habitation and processing sites and (1) the confluence of two water courses; (2) the proximity to a major watercourse; (3) the proximity to a marsh resource; and/or (4) well-drained, elevated land. A review of the attached maps does place Site 4 at the confluence of two watercourses - Sunswick Creek, a known resource for Native Americans, and the unnamed tributary that ran through Block 519. There is also overwhelming cartograhic and historic evidence to confirm the proximity of the project parcel to a large marsh biome and a major watercourse (the East River). However, Site 4 was historically designated as an estuarine wetland and never as elevated or well-drained land. Most probably the estuarine resources of the Site were tapped; however, the documented and inventoried archaeological sites (habitation and processing) on the north shore of western Long Island occur on raised, well-drained land.

The southern edge of the Site may have been slightly raised as the "ridge" of old Ridge Road ran north and intersected Block 519 at its southwestern corner. Also, the presence of the nineteenth century chemical works, most likely erected just outside or straddling the western border of the Block, implies perhaps a less marshy environment at that locus. (Noxious processing works, e.g., tan yards and bone mills, were usually removed from residential or service business areas and located near a water source on marginal real estate.) As discussed above, these two areas of possible attractiveness to Native Americans have been severely impacted over the years by road construction, utility installation, deep tank storage, and building foundations.

The soil borings information, albeit minimum, suggests that a mantle of fill ("mixed fill, cinders, brick, stones"), between 10 and 12 feet, overlies the pre-twentieth century grade. And, the Site 4 water table is approximately 6'9" below the current curb level. The expense, danger, and time involved in archaeological testing beneath such a fill overburden and in an area with a high water table are considerable.

There is always the chance that a random artifact could rest beneath the overburden and be encountered during any deep subsurface excavation. However, the evidence for prehistoric potential is not sufficient to warrant further research, field investigations, or monitoring.

Early maps and histories place a nineteenth century chemical works/factory on a border of the Site. Historical archaeologists are interested in the processes of early mill works. However, as discussed in the 1982 New York City Landmarks Preservation Commission's "Predictive Model," before considering field tests on the Jackson factory, the question of material remains must be addressed. Would such a "works" leave behind substantive evidence of the factory process itself or how it interacted with the Astoria and New York market? Such material culture remains are not anticipated for the Jackson Chemical Works. Additionally, the laying of 12th Street, utility installation, and the construction of the extant structures fronting on 12th Street have severely impacted the subsurface resources in the probable location of the factory.

The lot by lot analysis presented above, in conjunction with a review of available maps and atlases, does not suggest that Site 4 now hosts, beneath the fill overburden, the cultural remains of an early homestead or significant farm outbuildings. The evidence for historic potential is not sufficient to warrant further research, field investigations, or monitoring.

Endnotes

1. The Environmental Setting section is taken in part from Kearns, Betsy and Cece Kirkorian
   1986 "Phase IA Archaeological Sensitivity Report on the Resource Recovery Project: Maspeth, Queens." Ms on file with Parsons Brinckerhoff Quade & Douglas, Inc., NYC, NY.

2. Eisenberg, Leonard
   1978 "Paleo-Indian Settlement Pattern in the Hudson and Delaware River Drainages," in OCCASIONAL PUBLICATION IN NORTHEASTERN ANTHROPOLOGY, Vol. 4. p. 7.

3. Wisniewski, Stanley
   1977 "The Indians of Long Island," in MASPETH: OUR TOWN. Stankowski, editor. New York: Maspeth Savings and Loan.

4. Small, R. J.
   1972 THE STUDY OF LANDFORMS. London: Cambridge University Press.

5. Gwynne, Gretchen Anderson
   1982 "Prehistoric Archaeology at Mount Sinai Harbor, Suffolk County, New York," in THE SECOND COASTAL ARCHAEOLOGY READER, Vol. V. Stony Brook, NY: SCAA. pp. 190-191.

6. Saxon, Walter
   1978 "The Paleo-Indian on Long Island," in THE COASTAL ARCHAEOLOGY READER, Vol. II. Stony Brook, NY: SCAA. p. 252.

7. Personal Communication with Edward Platt (4/26/88), William Asadorian (5/2/88), and Samuel Yeaton (5/2/88).

8. Grettler, David J., Scott C. Watson and Jay F. Custer
   1988 "Final Archaeological Investigations of the Replacement of Bridges #17 and #18, on New Castle #221, New Castle County, Delaware." Ms on file with the Delaware Department of Transportation, Archaeological Series No. 62.

9. Kearns, Betsy, Cece Kirkorian and Lucianne Lavin
1987 "Phase IA Archaeological Assessment Report for the Tibbett Gardens Project, Bronx, New York." Ms on file with the NYC Landmarks Preservation Commission. p. 7.

10 Kearns, Betsy and Cece Kirkorian
1986 "Phase IA Documentary Study of Archaeological Potential, Davids Island Project, New Rochelle, New York." Ms. on file with the U.S. Army Corps of Engineers. p. 9.

11. Wyatt, Ronald J.
1982 "The Archaic on Long Island," in SECOND COASTAL ARCHAEOLOGY READER: 1900 TO THE PRESENT. James E. Truex, editor. Stony Brook, NY: SCAA. p. 71.

12. Gwynne, 1982: p. 192.

13. Bert Salwen, personal communication to C. Kirkorian, 3/11/88. See also Kearns and Kirkorian's "East River Landing: Phase IA Archaeological Assessment Report," 1987, Ms. on file with Allee, King, Rosen, and Fleming, Inc., New York.

14. Ritchie William
1980 THE ARCHAEOLOGY OF NEW YORK STATE. Harrison, NY: Harbor Hill Books. Revised edition. p. 16.

15. Smith, Carlyle S.
1950 THE ARCHAEOLOGY OF COASTAL NEW YORK. Vol. 43, Part 2, Anthropological Papers of the American Museum of Natural History, New York. p. 130.

16. Personal communication with Kevin McBride (PAST, University of Connecticut), Nicholas Bellantoni (Connecticut State Archaeologist), and Lucinda McWeeney (Yale University), April 13, 1988. Dr. Lynn Ceci, archaeology professor at Queens College, has published arguments (1980) that maize cultivation did not appear in this region until after the initial contact with Europeans. Inquiries on current work results and research were directed to Dr. Ceci (4/26/88); however, she did not feel at liberty to discuss the conclusions of the four publications "in press" or the National Science Foundation grant work, an examination of M. Harrington/Museum of Natural History's early twentieth century excavations, that is presently being reviewed.

17. Grettler, et al, 1988: p. 10.

18. Kearns, Betsy and Cece Kirkorian
1986 "The Proposed Quality Housing Program, Environmental Impact Statement: Appendix 5: Archaeological Assessment of the 34 Study Areas." Ms. on file with LPC.

19. Wyatt, 1982: p. 71.
The supposition of such shallow deposits is not valid for plots that have undergone centuries of urbanization, e.g., areas of lower Manhattan. Also, it must be remembered that this shallow deposition is measured from the grade level prior to any filling.

20. An overview and map of Hallett's Point archaeological sites can be found in Kearns and Kirkorian, 1986. See Appendix.

21. Bolton, Reginald Pelham
1922 INDIAN PATHS IN THE GREAT METROPOLIS. Indian Notes and Monographs, Museum of the American Indian, Misc. 23. pp. 174-176.

22. Bolton, Reginald Pelham
1934 INDIAN LIFE OF LONG AGO IN THE CITY OF NEW YORK. New York. pp. 148, 150, Bolton's locational data for this station was duplicated here in its entirety.

23. Grumet, Robert Steven
1981 NATIVE AMERICAN PLACE NAMES IN NEW YORK CITY. New York: Museum of the City of New York. pp. 52-53.

24. Photograph #53; Hell Gate Bridge, Astoria, Queens, June 1937, from Catalog of Photographs by Ralph Solecki - Long Island and Environs, Local Archaeology. On file at the Long Island Division of the Queens Borough Public Library.

25. Seyfried, Vincent
1984 300 YEARS OF LONG ISLAND CITY. Queens Commenuty Series. New York: Elgian Press Inc. p. 7.

26. ibid: p. 8.

27. ibid.

28. ibid: p. 9.
The exact location of these two farms is not known, but may have incorporated the subject parcel.

29. Seyfried, Vincent
1987 "An Historical Essay." In conjuction with the Socrates Sculpture Park, NYC Department of Parks.

30. ibid: p. 15.

31. Stokes, I. N. Phelps
1928 THE ICONOGRAPHY OF MANHATTAN ISLAND. Vol. III. New York: Robert H. Dodd. p. 553.

32. French, J. H.
1860 HISTORICAL AND STATISTICAL GAZETTEER OF NEW YORK STATE. Syracuse: R. P. Smith, Publisher. p. 549.

33. The "Map of the Villages of Astoria (Late Hallett's Cove) and Ravenswood, Long Island" (1840, Queens Borough Public Library) confirms the Thorburn ownership and factory presence.

34. THE WPA GUIDE TO NEW YORK
1939 The Federal Writers' Project. New York: Pantheon Books. p. 563.

35. French, 1860: p. 548.

36. Seyfried, 1987: n.p.

37. Seyfried, 1984: p. 21.

38. French, 1860: p. 548.
Seyfried, 1984: p. 20.

39. Seyfried, 1984: p. 23.

40. Maps and Atlases Used for Lot Analysis:

"Map of Property at Hallett's Cove, Sunswick Point, belong to C. Edwards Esqr. & others," 1835. Queens Borough Public Library (QBPL).

"Map of the Villages of Astoria (Late Hallett's Cove) & Ravenswood, Long Island," 1840. (QBPL)

"Map of Valuable Building Lots in the Village of Astoria, Long Island," 1850(?). New York Public Library (NYPL).

Walling. "Topographical Map of the Cities of Kings and Queens," 1859. (NYPL)

Wolverton, C. Atlas of Queens County, Long Island, New York. 1891. (QBPL)

Hyde, E.B. Atlas of the Borough of Queens. Vol. 2, 1903; Vol. 2, 1919; Vol. 2, 1908 corr. to 1911; Vol. 1, 1928, corr. to 1934 (WBPL); Vol. 1, 1928 corr. to 1955; Vol. 1, 1928 corr. to 1973 (NYPL); Vol. 1, 1928 corr. to 1987 (Queens Borough Hall, House Numbers Division).

Photo A: Looking northeast from the south side of Broadway

Photo B: Looking northwest from the south side of Broadway

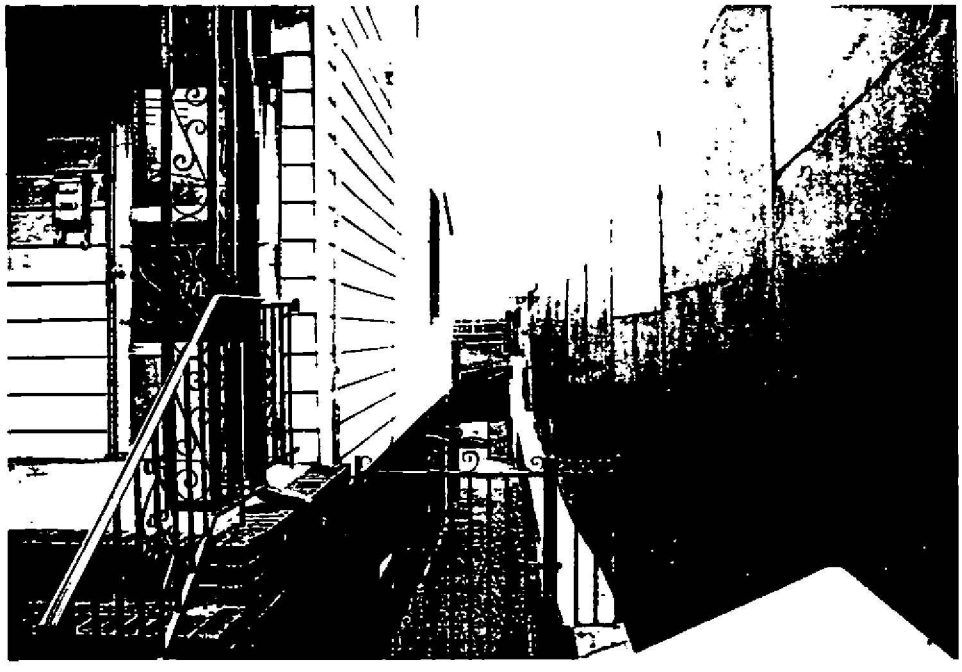


Photo C: From 12th Street looking east

Photo D:
Looking east
down an alley
from 12th Street

Photo E: The corner of 12th Street and Camelia Street looking south

Photo F: Looking southeast from 12th Street

Photo G: From Camelia Street looking south

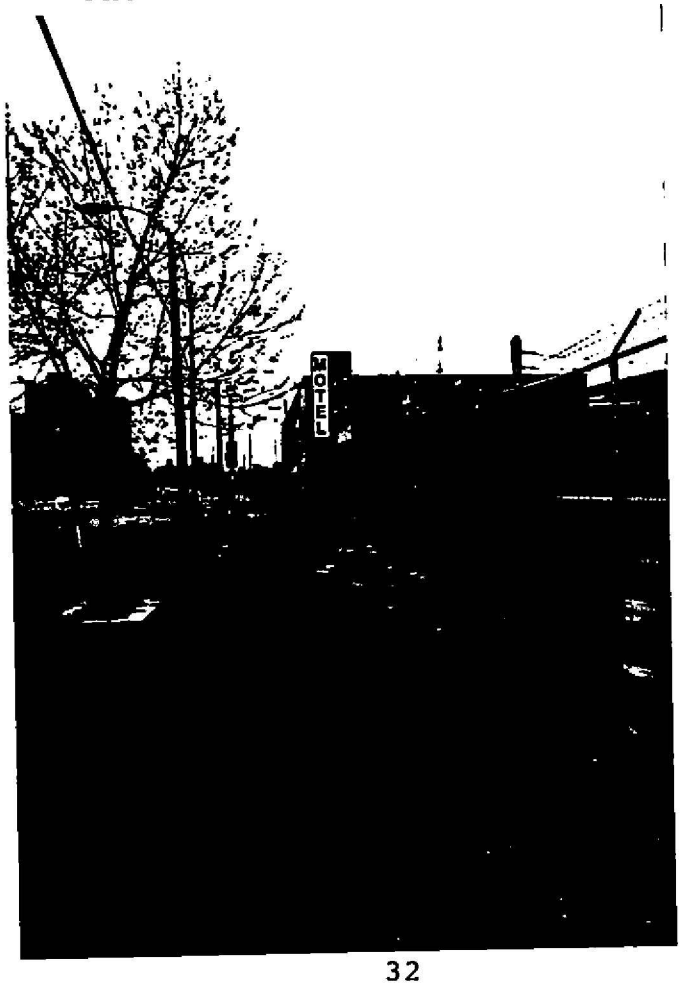


Photo H:
Looking south
along 14th St.

Photo I: Looking west into Lot 6 from 14th Street

Photo J: Lot 6 - looking northeast from Broadway

Photo K: Lot 6 - looking north from Broadway

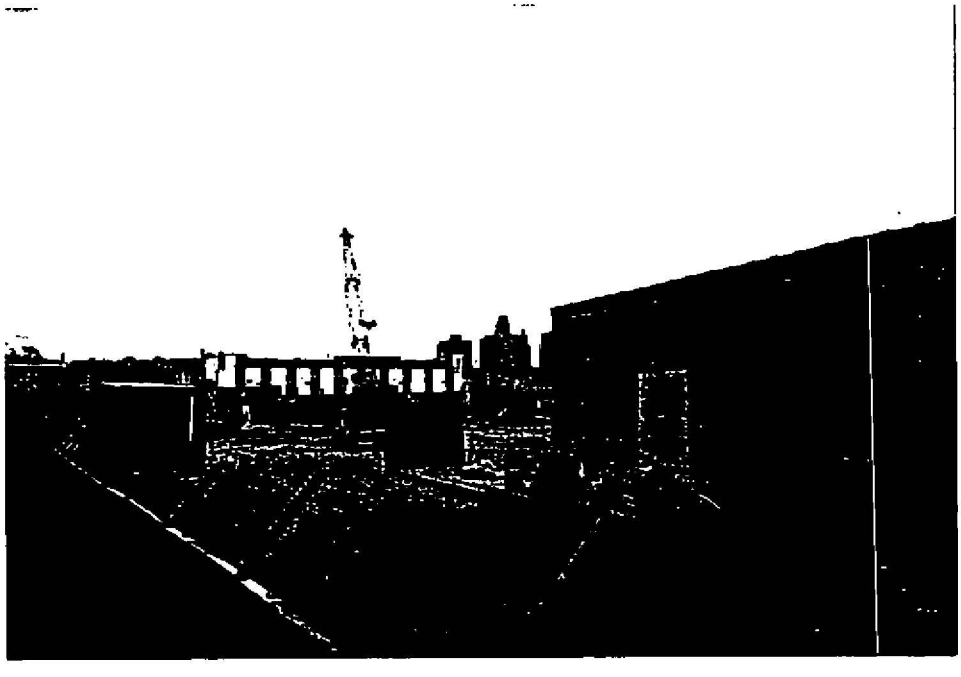


Photo L: Lot 6 - looking southeast from 12th Street

Figure 1

Site 4 Project Map
Provided by the Department of City Planning

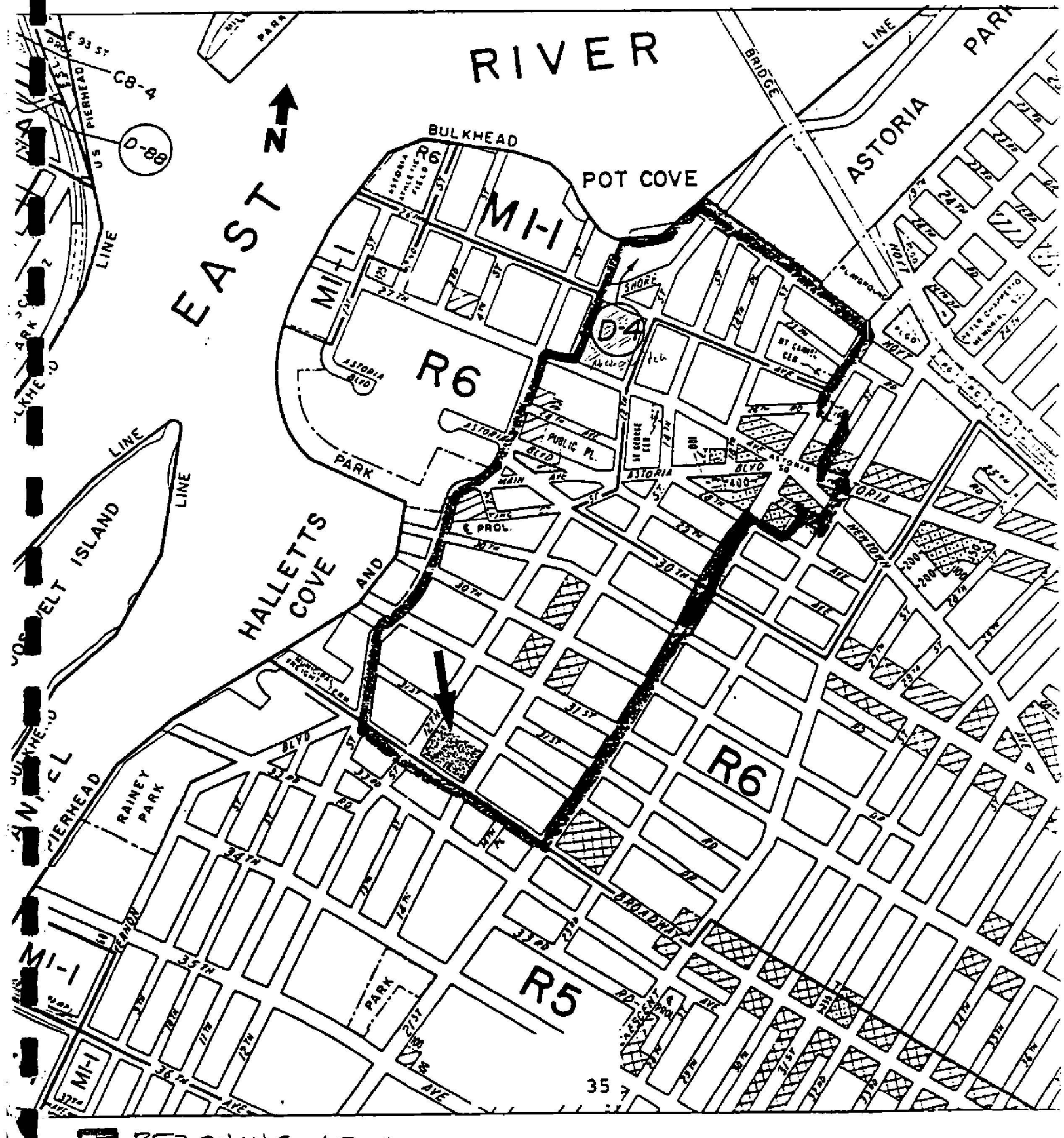


Figure 2

USGS Topographic Map: Central Park Quadrangle

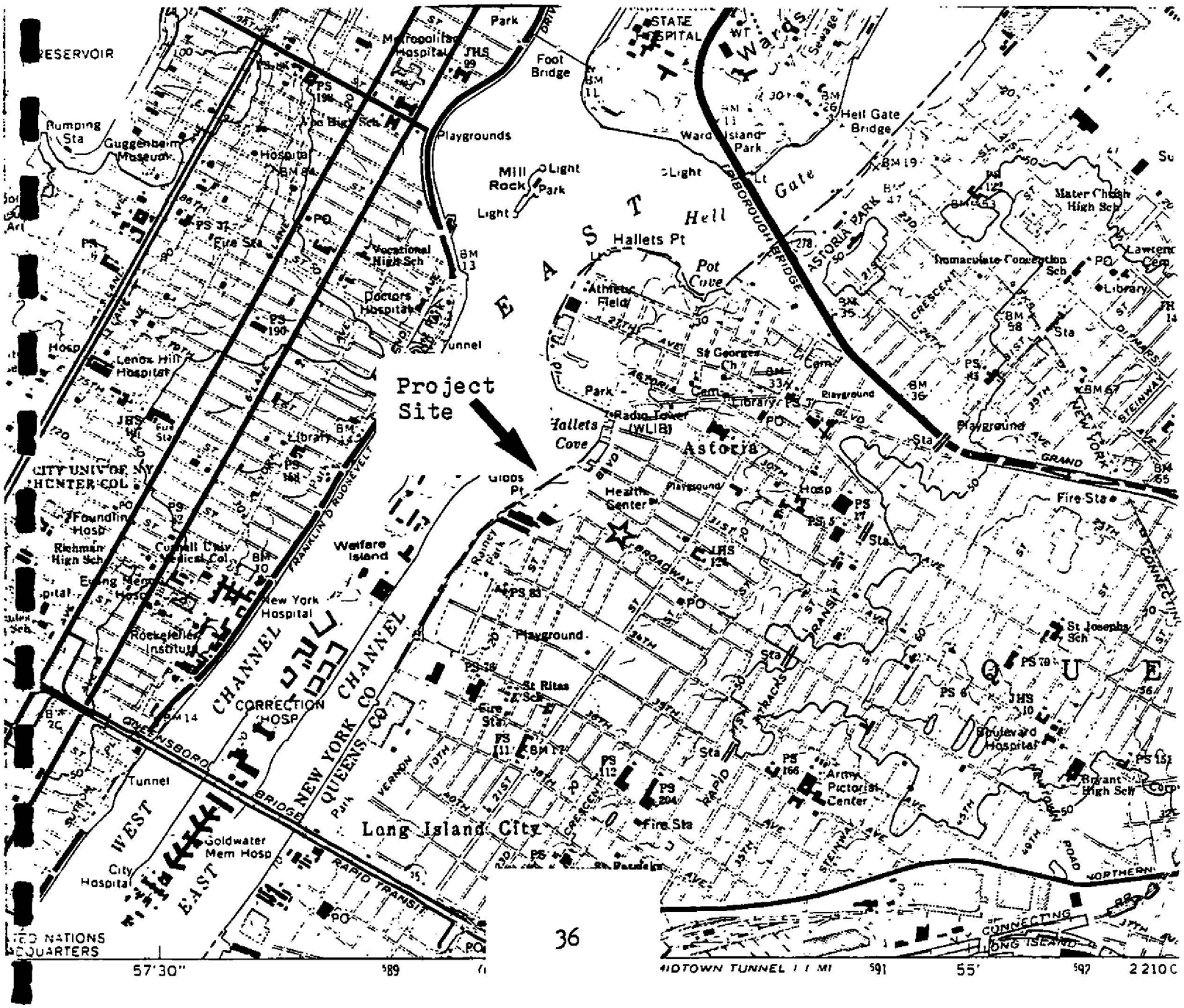


Figure 3

East River Shore of Long Island City in 1858
Photocopied from Seyfried, 1984: n.p.

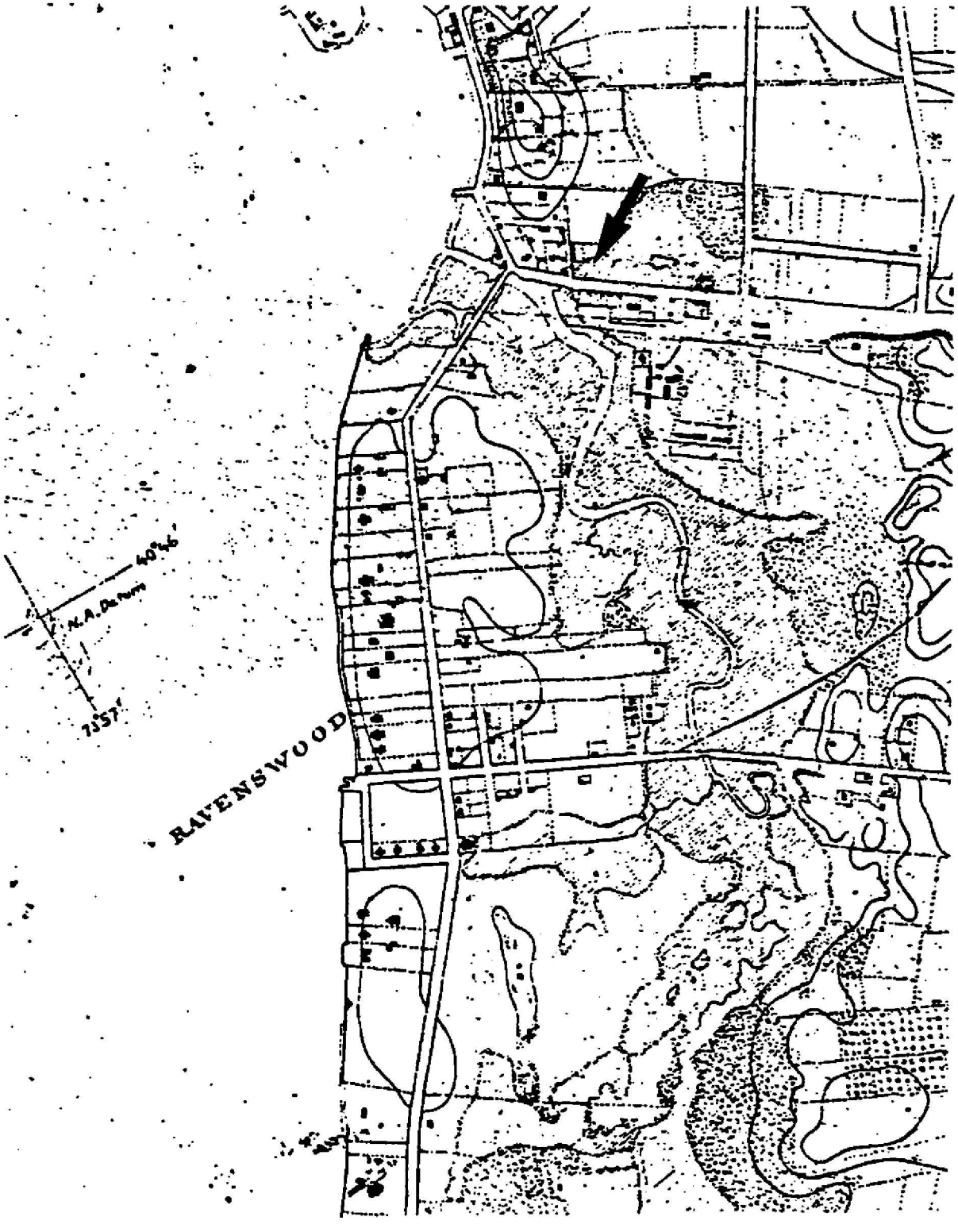
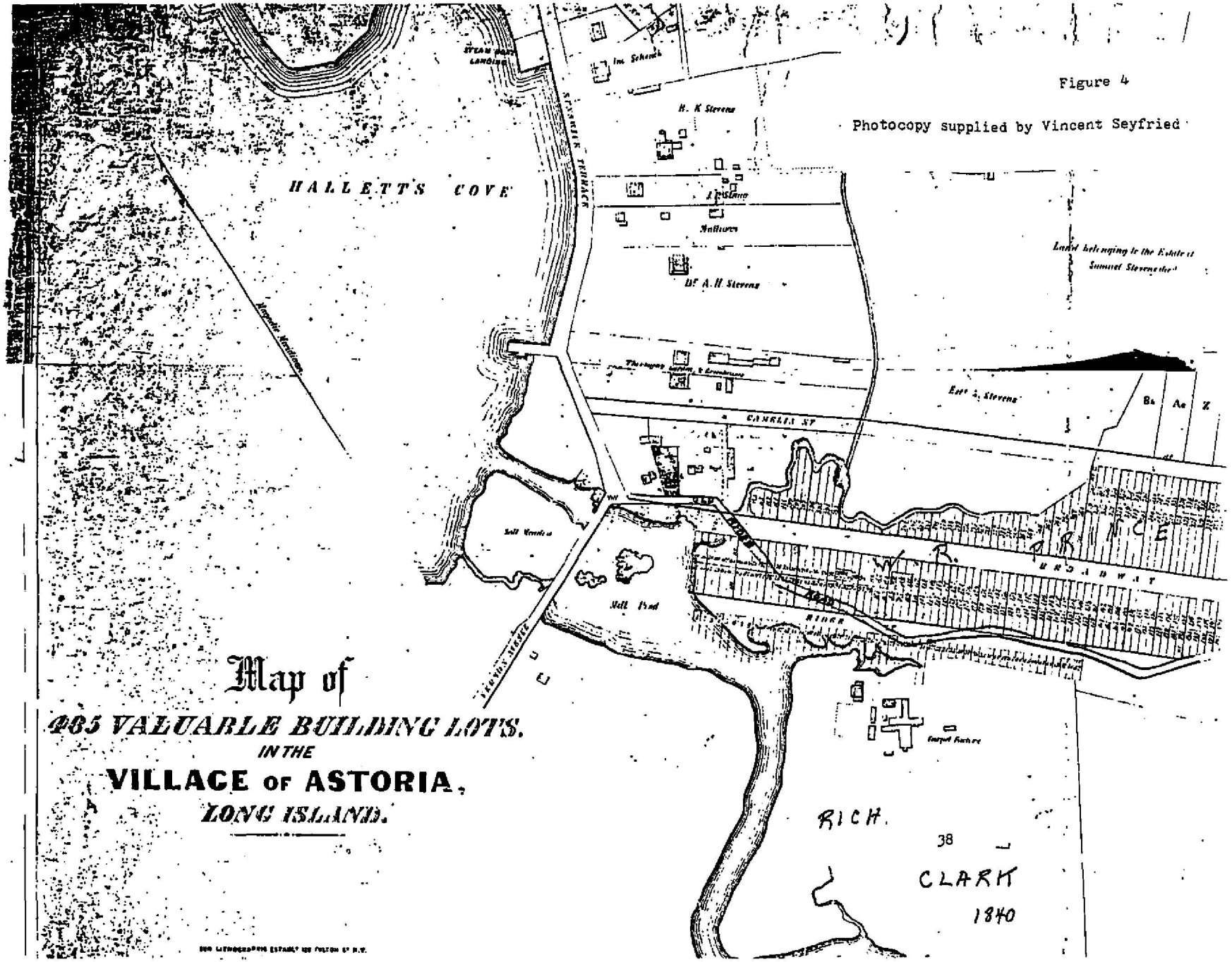
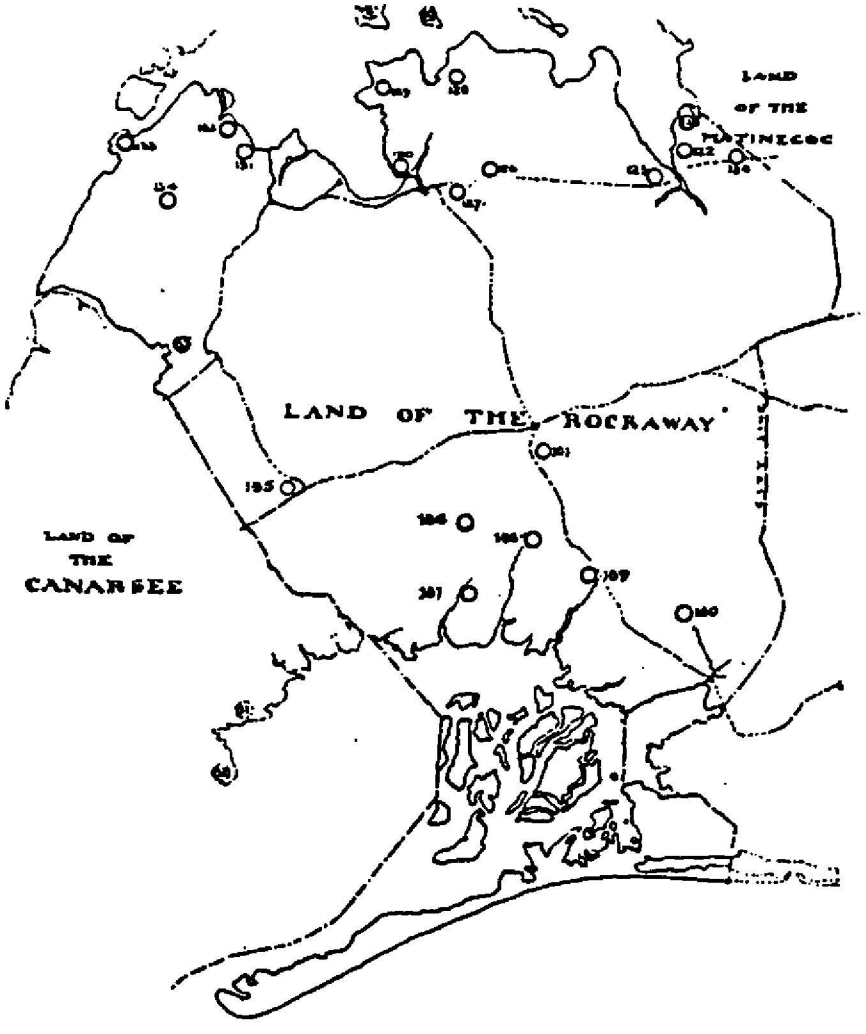


Figure 4

Photocopy supplied by Vincent Seyfried



Bolton: Indian Sites in the Borough of Queens
from Bolton, 1934: p. 148



INDIAN SITES IN THE BOROUGH OF QUEENS

Grumet: Upper Delawaran Trails and Settlements in New York City, Queens from Grumet, 1981: p. 71.

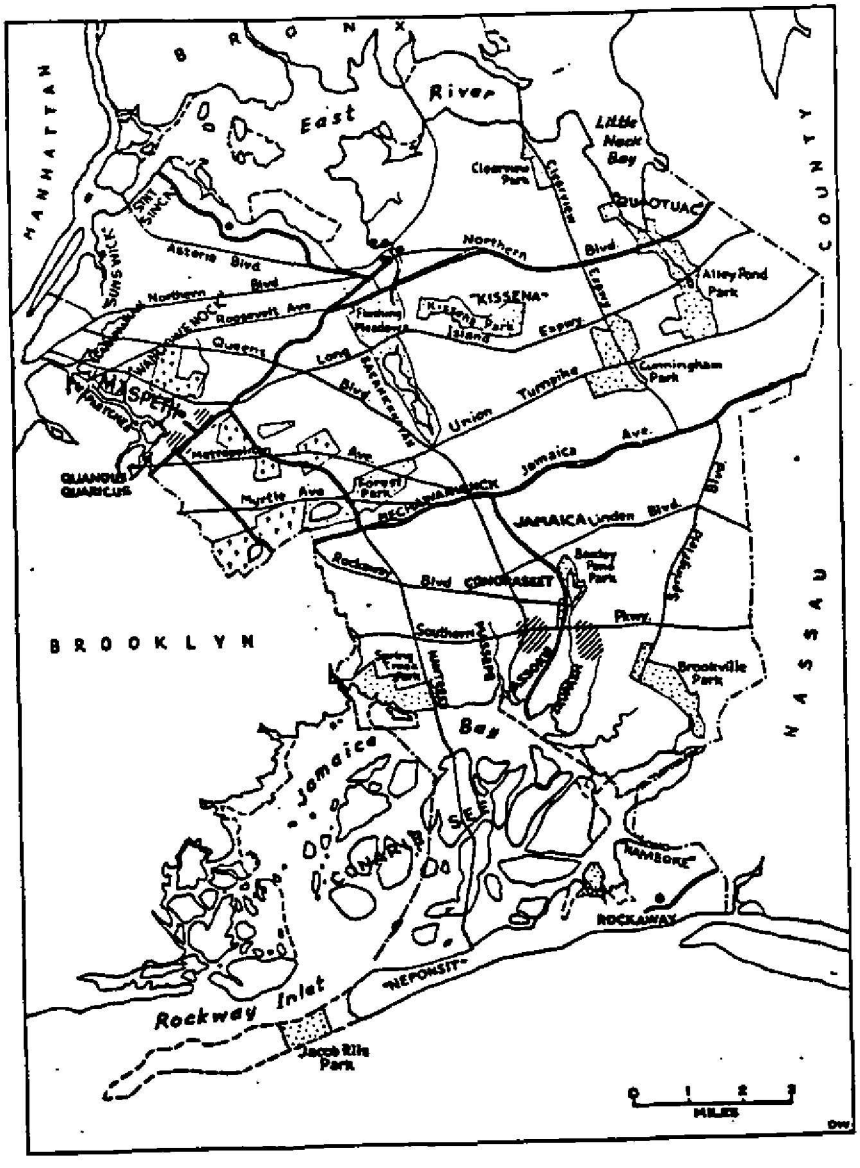
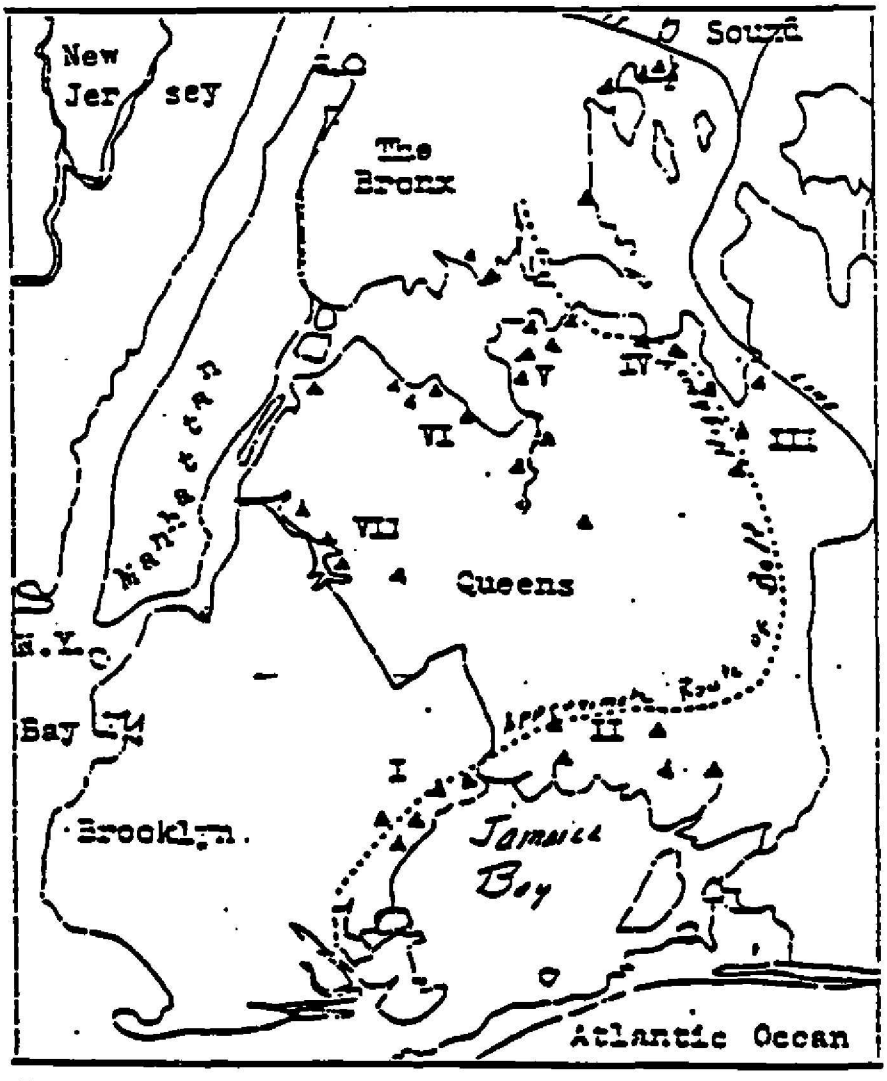


Figure 7

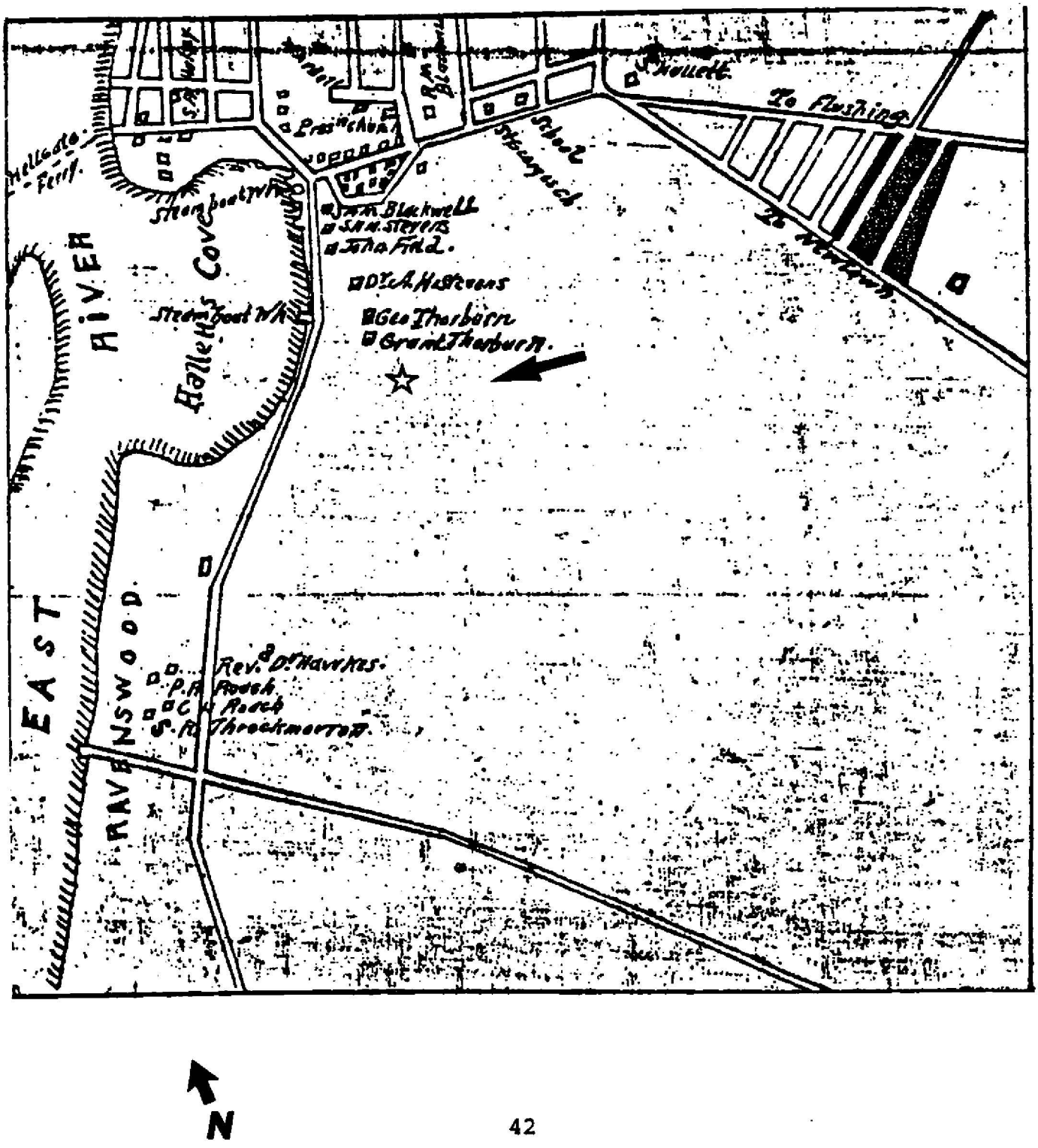
Solecki: Indian Village Sites in Queens
from: Solecki, Ralph
1941 "The Indians Lived Here," in So This Is Flushing (newsletter), Flushing Historical Society.



INDIAN VILLAGE SITES: Triangles on diagram indicate sites explored by Committee on American Antiropology of the Flushing Historical Society. Important locations described in accompanying article are numbered.

Figure 8

Map of Ravenswood and Astoria, dated June 28, 1837
Photocopied from Seyfried, 1984: n.p.



N

Figure 9

Photocopy supplied by Vincent Seyfried

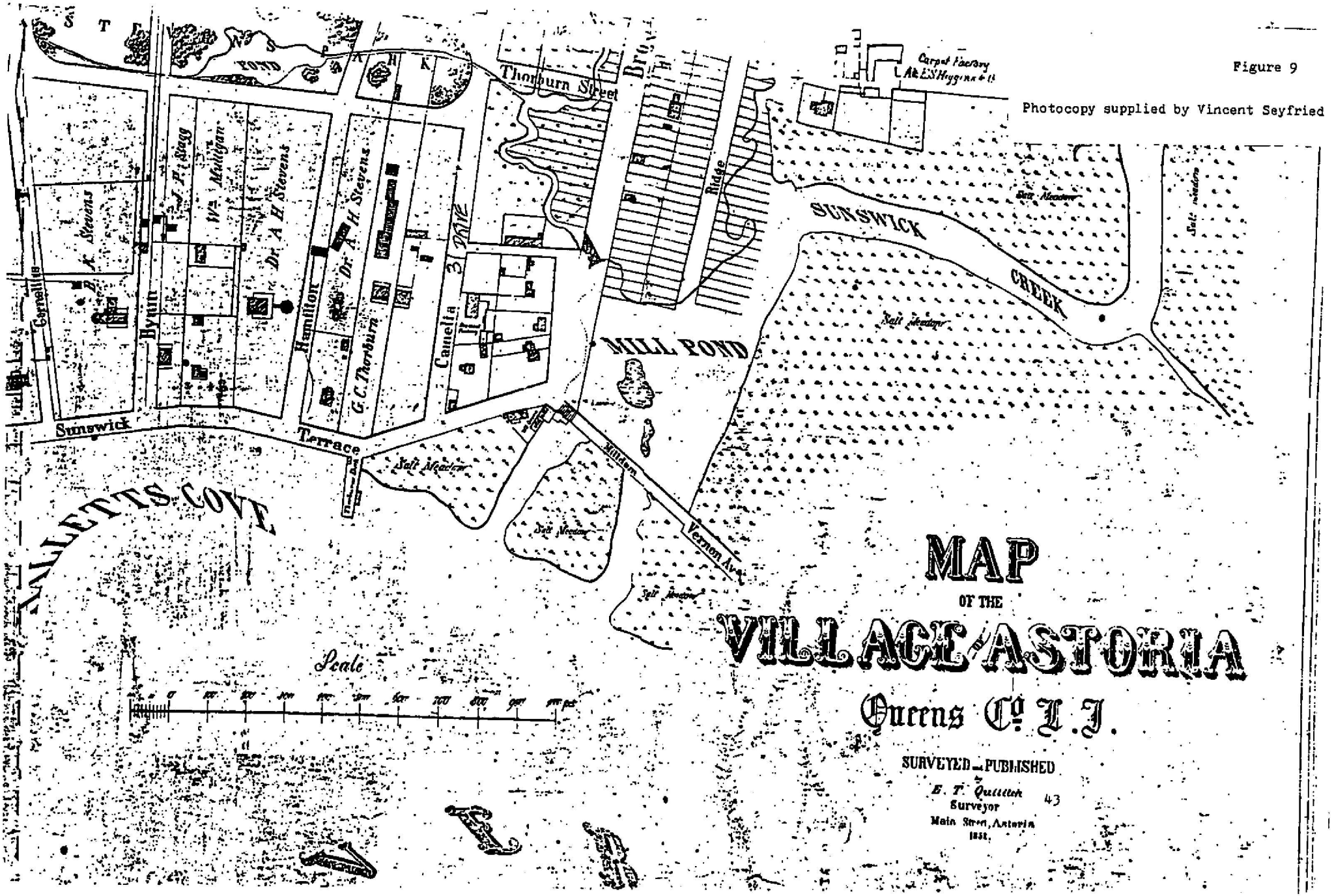


Figure 10

1859 Map of Hallett's Cove
Supplied by Vincent Seyfried

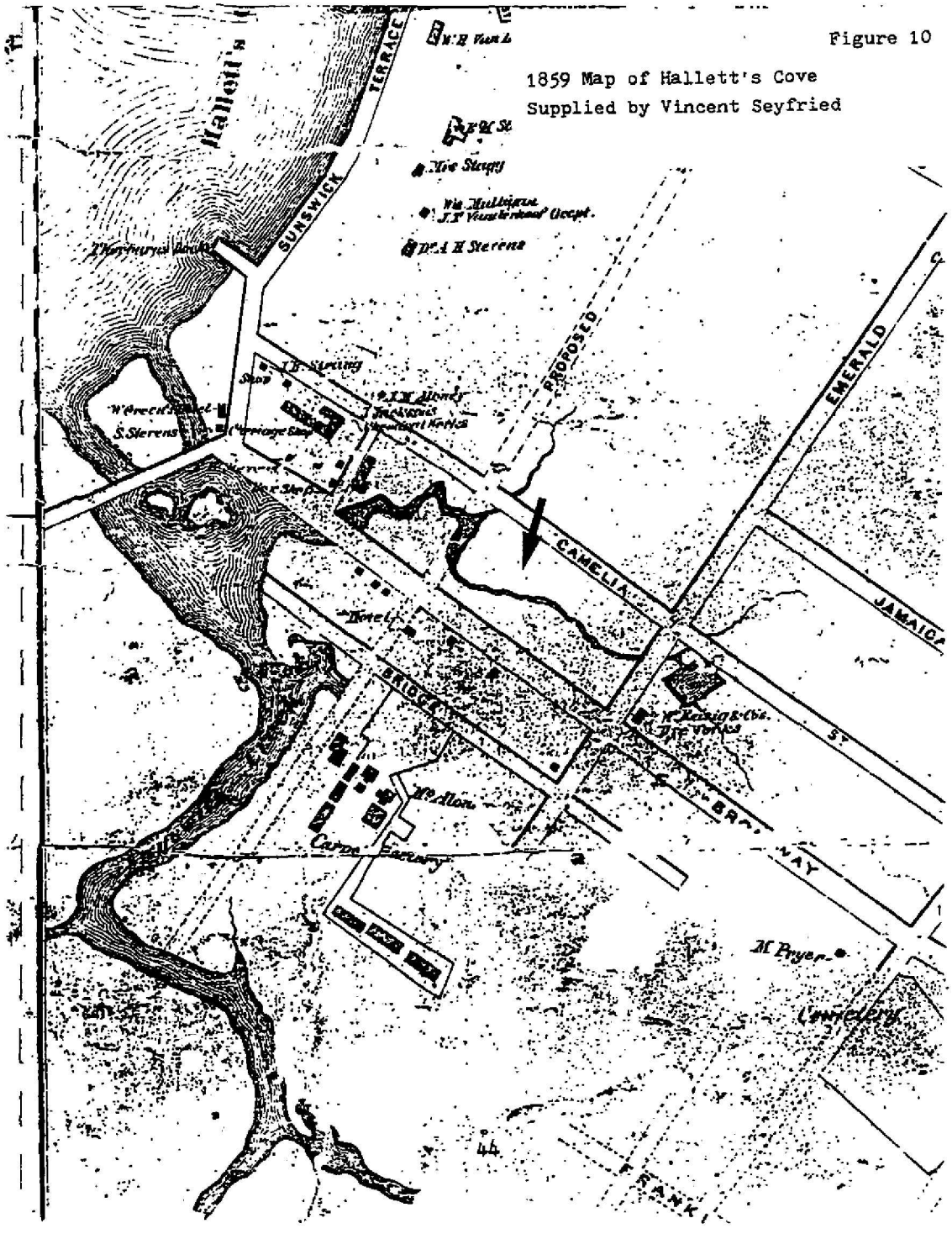
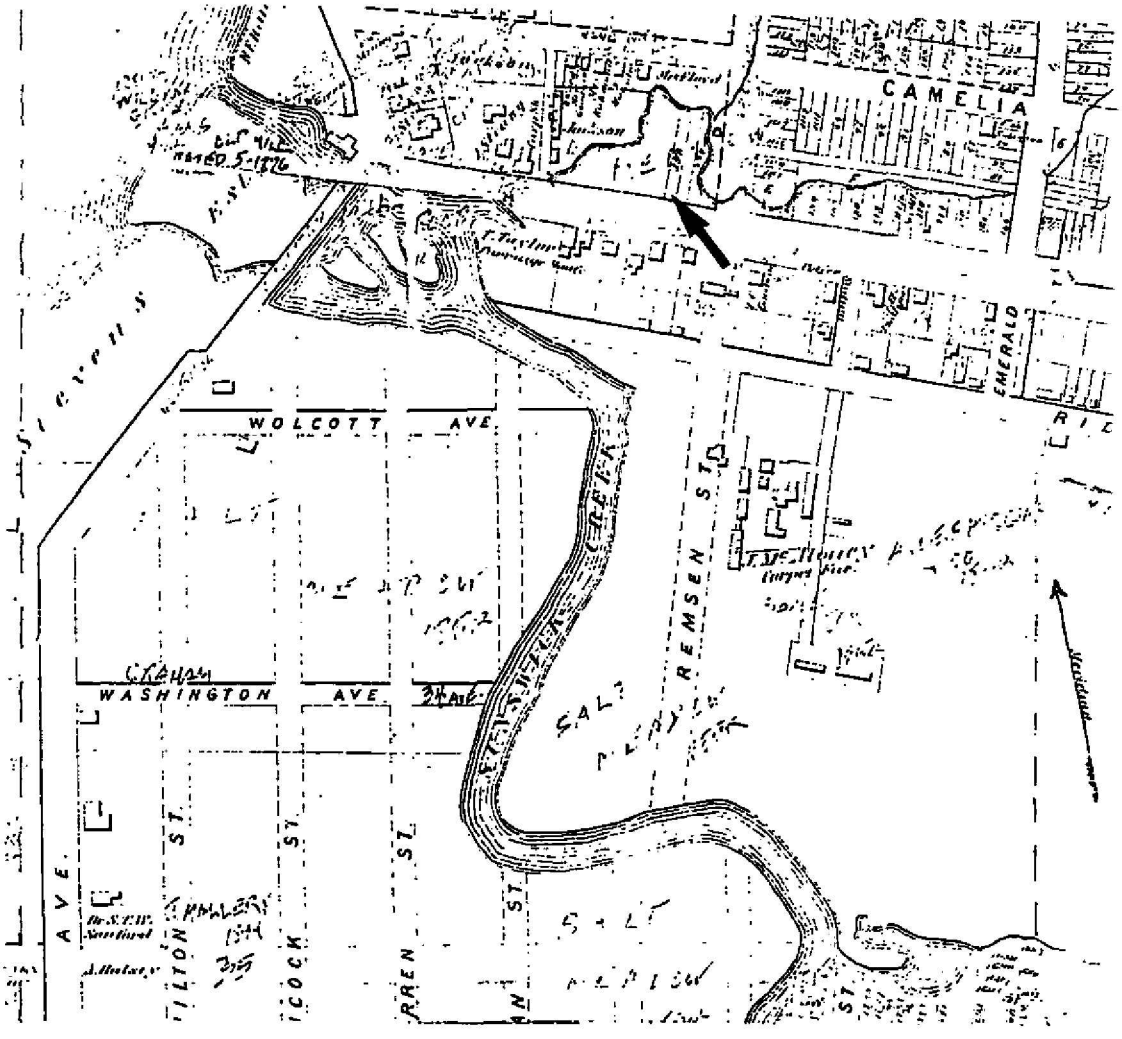
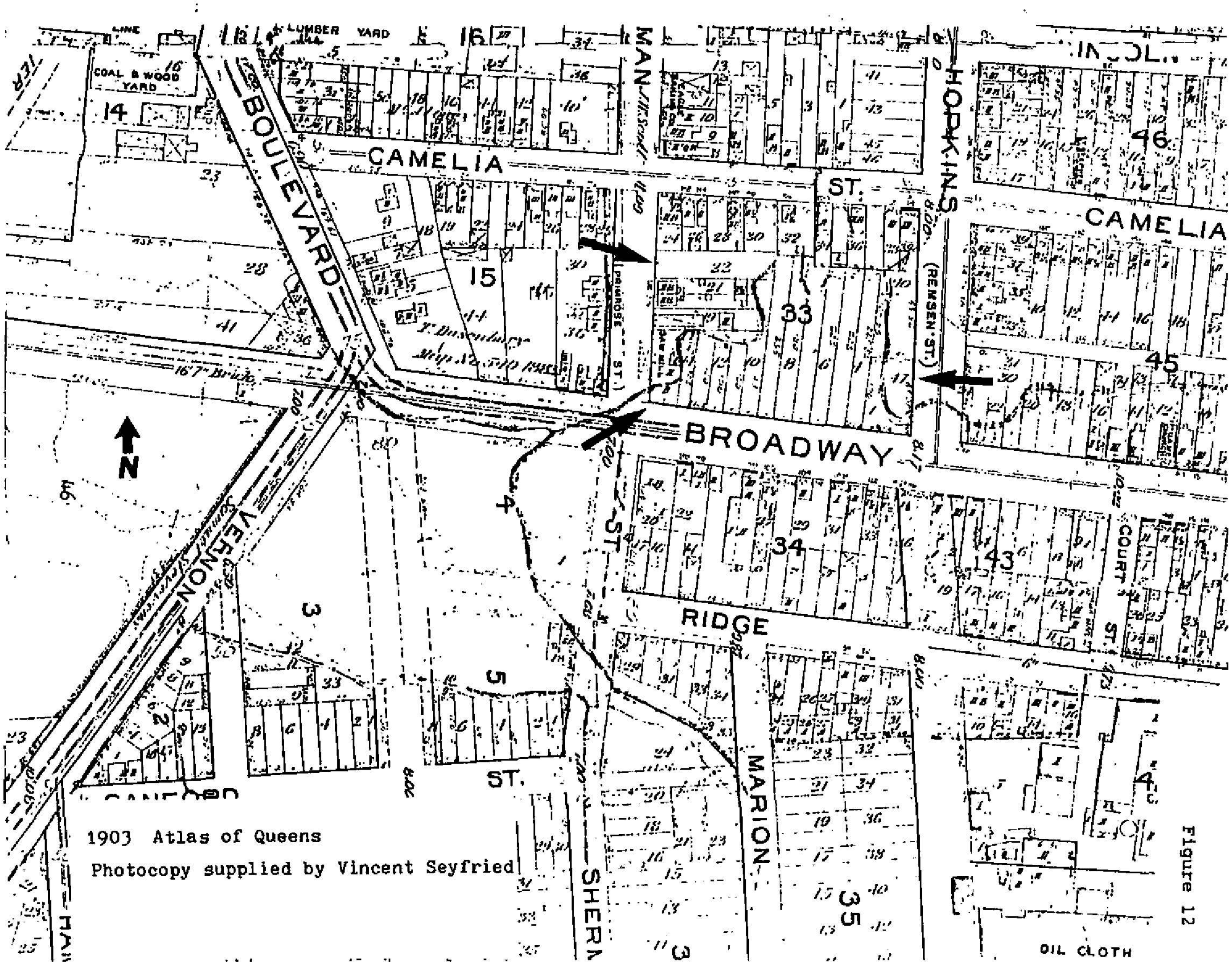


Figure 11

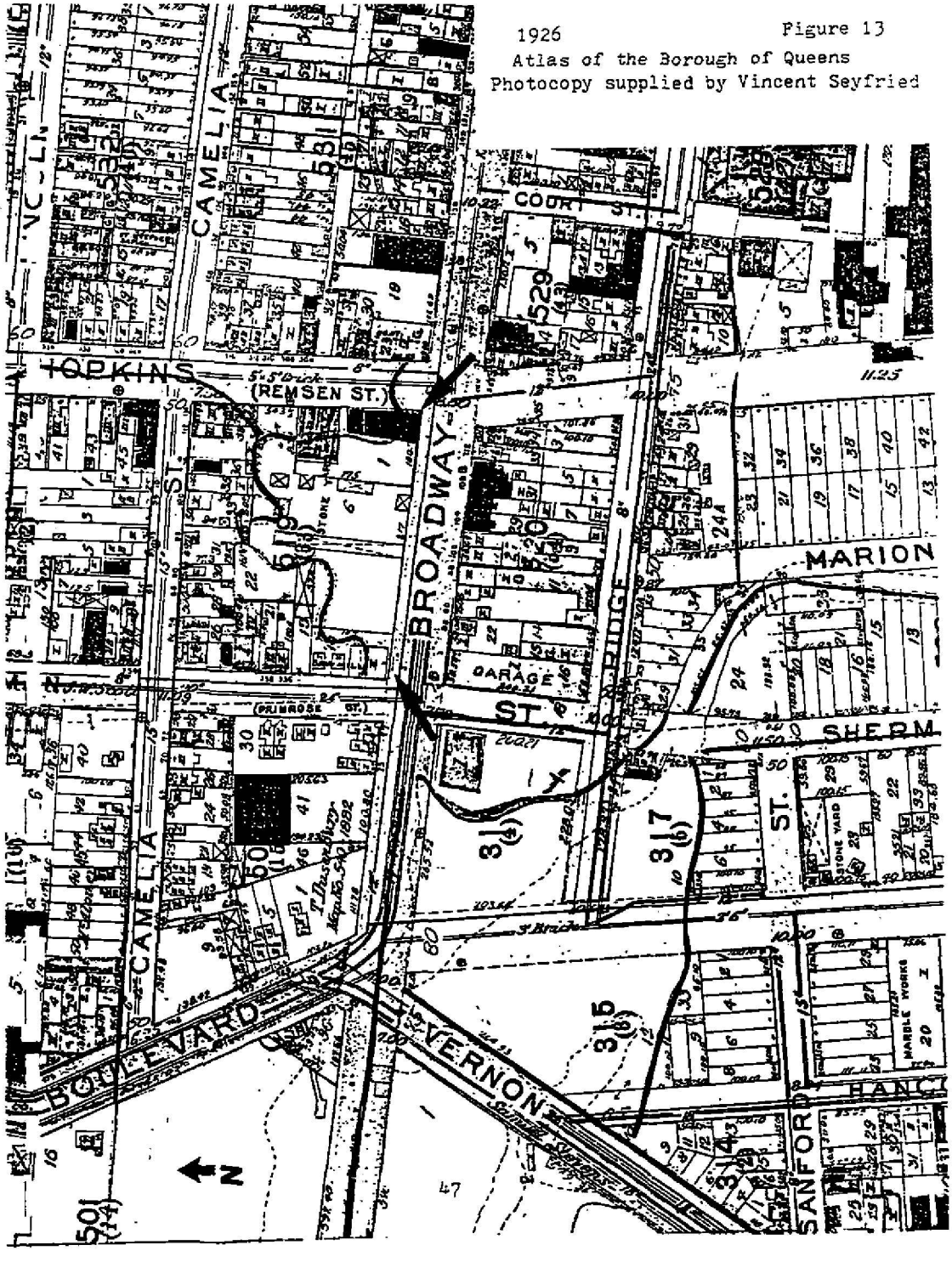
1873 Map of Hallett's Cove
Photocopy supplied by Vincent Seyfried.





1903 Atlas of Queens
Photocopy supplied by Vincent Seyfried

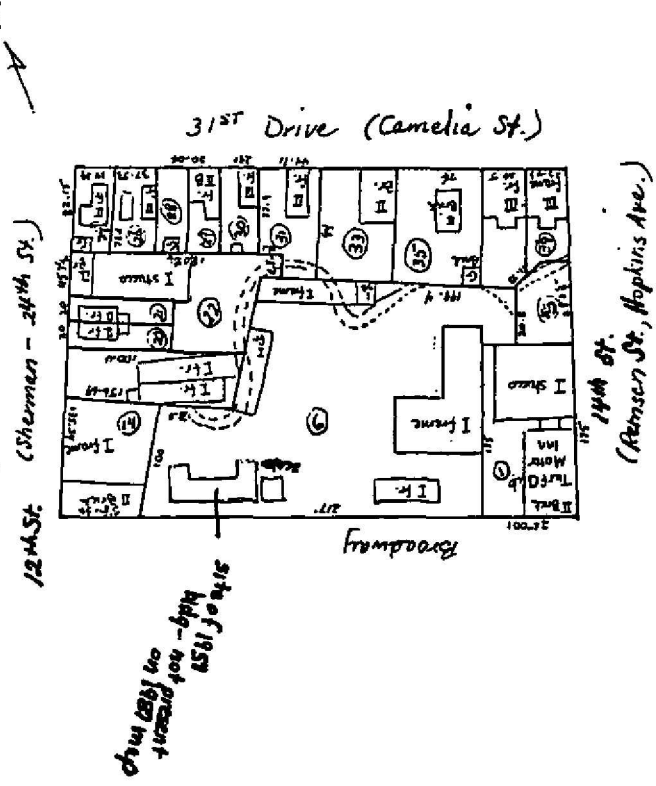
Figure 12



1926 Figure 13
Atlas of the Borough of Queens
Photocopy supplied by Vincent Seyfried

Figure 14

Compiled sketch, not to scale, measurements given.



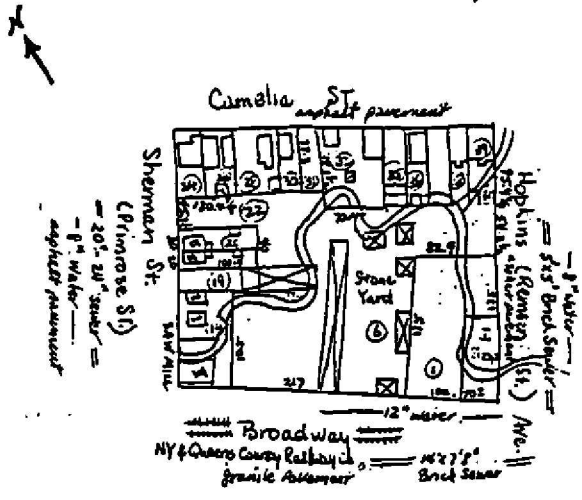
1987
Block 579
E. Belcher Hyde
1928 corr. to. June 1987
vol. 1, plate 21

and

1987
Sanborn Land
Use Map

Figure 15

Sketch, not to scale, measurements given.
From
Block 510 (33)
Atlas of the Borough of Queens, Vol. 2, Ward 1
Plate 6
E. Belcher Hyde, 1919

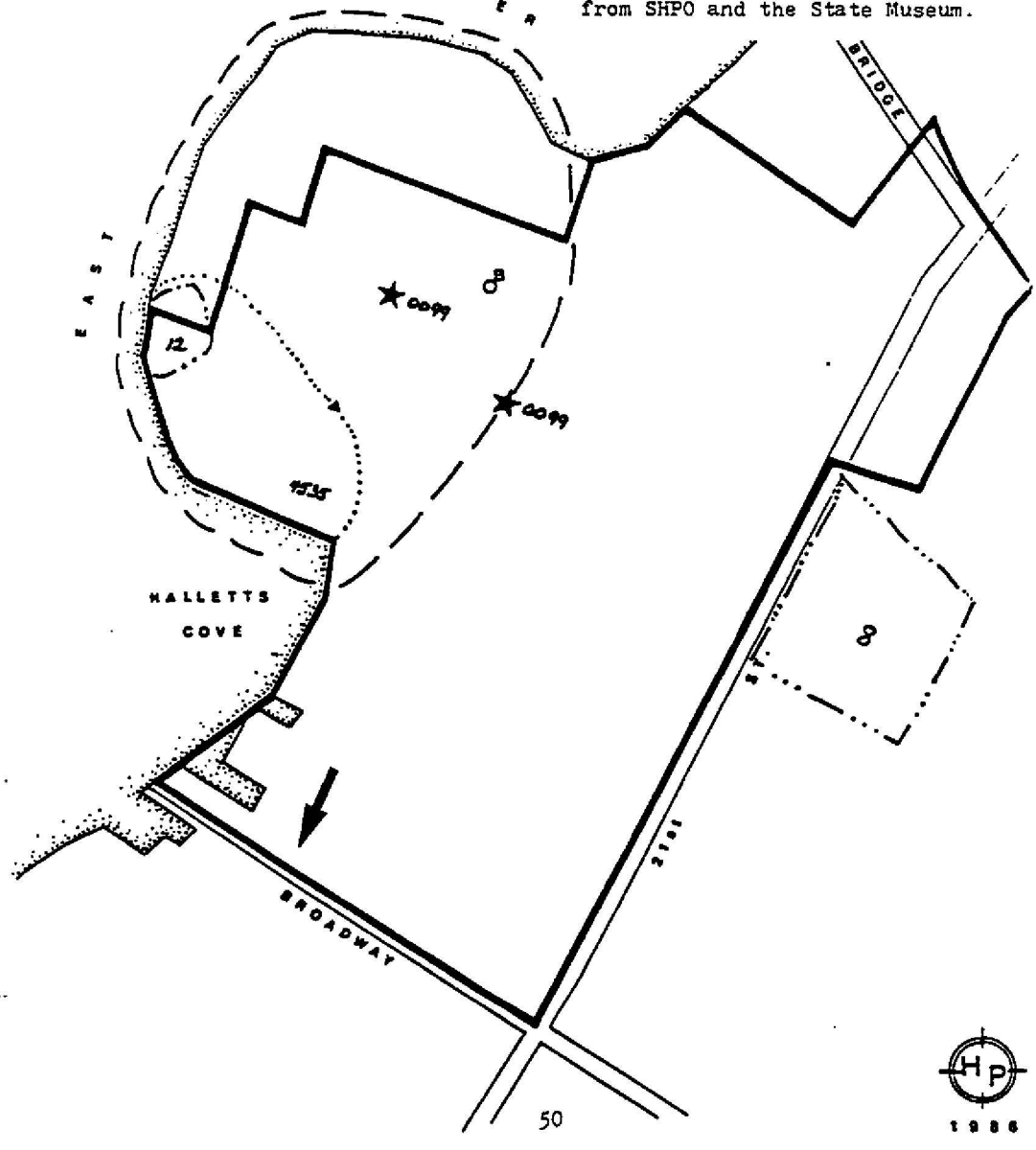


QUALITY HOUSING
ARCHAEOLOGICAL RESOURCE OVERVIEW

Appendix A

Queens
Neighborhood I

Archaeological site data presented in the Quality Housing Rezoning Report. These same sites are presented in the following letters from SHPO and the State Museum.



HP
1986

New York State Office of Parks, Recreation and Historic Preservation
The Governor Nelson A. Rockefeller Empire State Plaza
Agency Building 1, Albany, New York 12238
518-474-0456

April 25, 1988

Mr. Cece Kirkorian
Historical Perspectives
P.O. Box 331
Riverside, Connecticut 06878

Dear Mr. Kirkorian:

Re: Information Request
IA Archaeological Assessment
West Astoria, Queens County

The Field Services Bureau of the New York State Office of Parks, Recreation and Historic Preservation/State Historic Preservation Officer has received your request for information on properties or sites which are included in or may be eligible for inclusion in the National and State Registers of Historic Places.

Based upon the information which you provided and a file search conducted by our staff, we have been able to determine that:

☐ The project area has been comprehensively surveyed by a qualified professional and reviewed by this office. To the best of our knowledge, the project area contains no buildings, objects, or districts which are eligible for or included in the National or State Registers of Historic Places.

☐ To our knowledge, the project area has not been professionally surveyed for historic resources. We recommend that any buildings or structures proximal to or within this area should be documented and evaluated for potential importance. Any information we do have on file from sources other than a comprehensive survey are noted on the following page.

☐ The project area has been comprehensively surveyed by a qualified professional and reviewed by this office. The results of this survey are described on the following page.

☒ No architectural information requested.

☐ The following resources have been reported to our office and are located in or in the vicinity of the project area which you identified:

☐ I. National/State Register of Historic Places listed or eligible properties:

☐ II. Properties included in Statewide Inventory:

☒ III. Archaeology

☒ With regard to archeology, it is the opinion of this office that your project lies in an area that is archaeologically sensitive. This determination is based upon our office's archaeological sensitivity model. Archaeologically sensitive areas are determined by proximity to known archaeological sites, as well as the area's likelihood of producing other archaeological materials. It is our opinion that unless substantial ground disturbance can be documented, an archaeological survey should be undertaken to determine the nature and extent of archaeological resources in your project area. If you wish to submit evidence regarding ground disturbance, it should include statements concerning the nature and date of the disturbances as well as a map indicating the locations and depths of such activities. Photographs of recent construction activities keyed to a map are very useful in this regard. Once we have had an opportunity to review the additional information provided as the evidence regarding prior disturbance or as a result of the archaeological survey, we will be able to complete our review of this project and issue our final comments.

☐ At the present time, there are no previously reported archaeological resources in your project area or immediately adjacent to it. This finding is based upon our office's archaeological sensitivity model. Archaeologically sensitive areas are determined by proximity to known archaeological sites, as well as the area's likelihood of producing other archaeological materials.

☒ Regarding your request for site file information, the following archaeological resources are located within or proximal to the project area: (keyed to attached map)

A081-01-0099: Hallets Point (Parker #12).

A081-01-0101: Parker Site #14.

A081-01-0100: Sunwick Site, Shell Midden (Bolton 1922).

☒ Additional Comments:

A061-01-0146: Horn's Hook site, ca. 1776. Reported to OPRHP in 1977 by Brooklyn childrens Museum (Michael Cohn), apparently well documented in literature.

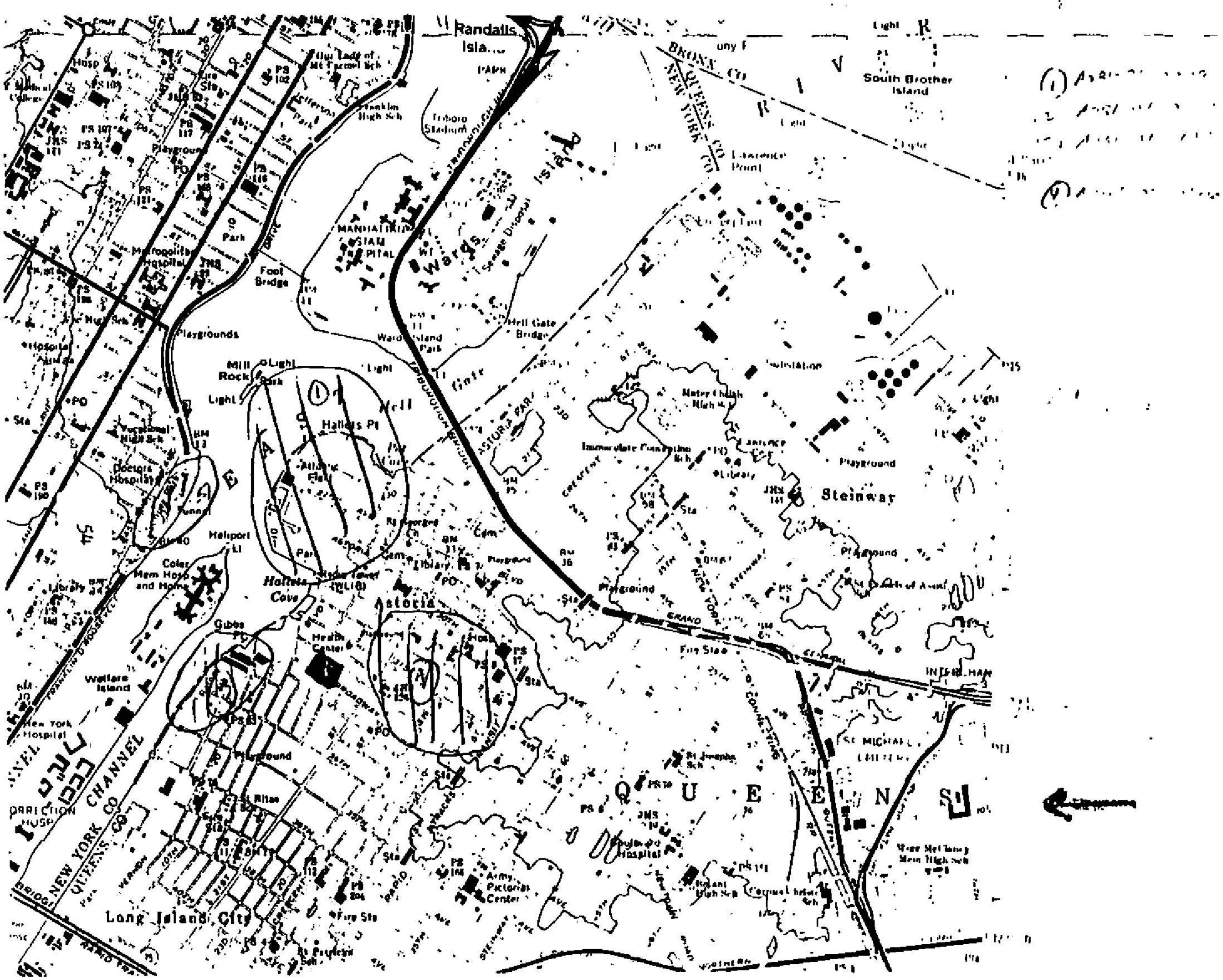
Should you have any further questions, please contact our Project Review staff at (518) 474-3176.

Sincerely,

David S. Gillespie
Director
Field Services Bureau

DSG:VJD:sm
#2a (10/86)

Attachment: Map


Randalls Island
South Brother Island
BRONX CO
NEW YORK CO
QUEENS CO
Triboro Stadium
Franklin High Sch
Lawrence Point
MANHATTAN STATE HOSPITAL
Wards Island
Foot Bridge
Metropolitan Hospital
Playgrounds
Hell Gate Bridge
Mill Rock
Hallets Pt
Doctors Hospital
Heliport
Hallets Cove
Astoria
Steinway
Welfare Island
Gibbs Pt
CHANNEL
Army Pictorial Center
Long Island City
Q U E E N S

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12230

NEW YORK STATE MUSEUM
DIVISION OF RESEARCH AND COLLECTIONS

Search Results:

NEW YORK STATE MUSEUM
Prehistoric Site File

Date: April 20, 1988

To: Cece Kirkorian
Historical Perspectives
P.O. Box 331
Riverside, Connecticut 06878

Area Searched: West Astoria project site, 1 block area (see attached map).

In response to your request our staff has conducted a search of our data files* for locations and descriptions of prehistoric archaeological sites within the area indicated above.

The results of the search are given below. Please refer to the NYSM site identification numbers when requesting additional information.

If specific information requested has not been provided by this letter, it is likely that we are not able to provide it at this time, either because of staff limitations or policy regarding disclosure of archaeological site data.

Any questions regarding this reply can be directed to Philip Lord, Jr., at (518) 473-1503 or the above address, mark as Atten: Site File.

*[NOTE: Our files normally do not contain historic period sites or architectural properties. Contact Chuck Florence, Office of Parks Recreation and Historic Preservation, Albany at (518) 474-3176 to begin the process of collecting data on these types of sites.]

RESULTS OF THE FILE SEARCH:

The following sites are located in or adjacent to the project area:

None

Code "ACP" = sites reported by Arthur C. Parker in The Archeology Of New York, 1922, as transcribed from his unpublished maps.

SEARCH CONDUCTED BY: B.W. (initials)
Staff, Office of the State Archaeologist

EVALUATION OF ARCHAEOLOGICAL SENSITIVITY FOR PREHISTORIC (INDIAN) SITES
Examination of the data suggests that the location indicated has the following sensitivity rating:

[ ] HIGHER THAN AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.

[✓] AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.

[ ] LOWER THAN AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.

[ ] MIXED PROBABILITY OF PRODUCING PREHISTORIC ARCHEOLOGICAL DATA.

The reasons for this finding are given below:

[ ] A RECORDED SITE IS INDICATED IN OR IMMEDIATELY ADJACENT TO THE LOCATION AND WE HAVE REASON TO BELIEVE IT COULD BE IMPACTED BY CONSTRUCTION.

[ ] A RECORDED SITE IS INDICATED SOME DISTANCE AWAY BUT DUE TO THE MARGIN OF ERROR IN THE LOCATION DATA IT IS POSSIBLE THE SITE ACTUALLY EXISTS IN OR IMMEDIATELY ADJACENT TO THE LOCATION.

[✓] THE TERRAIN IN THE LOCATION IS SIMILAR TO TERRAIN IN THE GENERAL VICINITY WHERE RECORDED ARCHAEOLOGICAL SITES ARE INDICATED.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A HIGH PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A MEDIUM PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE SUCH AS SUGGEST A LOW PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] EVIDENCE OF PRIOR DESTRUCTIVE IMPACTS FROM CULTURAL OR NATURAL SOURCES SUGGESTS A LOSS OF ORIGINAL CULTURAL DEPOSITS IN THIS LOCATION.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE MIXED, A HIGHER THAN AVERAGE PROBABILITY OF PREHISTORIC OCCUPATION OR USE IS SUGGESTED FOR AREAS IN THE VICINITY OF STREAMS OR SWAMPS. LOW PROBABILITY IS SUGGESTED FOR AREAS OF EROSIONAL STEEP SLOPE. OTHER AREAS WITHIN THE PROJECT SUGGEST AVERAGE PROBABILITY OF USE.

COMMENTS:

#12 = 4535
Shell heap 7/2/54

HISTORICAL HP PERSPECTIVES

April 12, 1988

Phil Lord
Rm CEC 3118
New York State Museum
Empire State Plaza
Albany, New York 12230

Dear Phil,

We are currently under contract with the New York City Department of City Planning to conduct a phase IA archaeological assessemnt for a portion of a block in West Astoria, Queens. I have enclosed a map with the project area identified. From our work two years ago on the Quality Housing Rezoning Project, we know that there are prehistoric sites in the Hallet's Cove neighborhood immediately north of the project parcel. However, we would appreciate an updated file search that centered on the West Astoria site. Thank you very much.

Sincerely,

Cece Kirkorian

encl.

57

P.O. BOX 331 RIVERSIDE, CONNECTICUT 06878
(203) 661-0734

Appendix B

Soil Borings - Block 519, Lot 6

West Astoria

Boring Number	1	2	3	4
Mixed fill, cinders, brick, stones	0.4-10'	04.-11'	0.9-13'	0.7-12'
	--- water level 6'9" ---			
very soft clay	10-16'	11-16'	13-17'	12-15'
medium compact sand	16-40' loose fine sand	16-19'	17-20'	15-17' loose medium sand 17-19'
	loose fine & clay	19-24'	20-25'	19-25'
	medium compact sand	24-35'	25-25'	25-35'

(Source: NB 1806/57, Record Room, Department of Buildings. Borough Hall, Kew Gardens, Queens.)